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CFETP 4R0X1
Parts I and II
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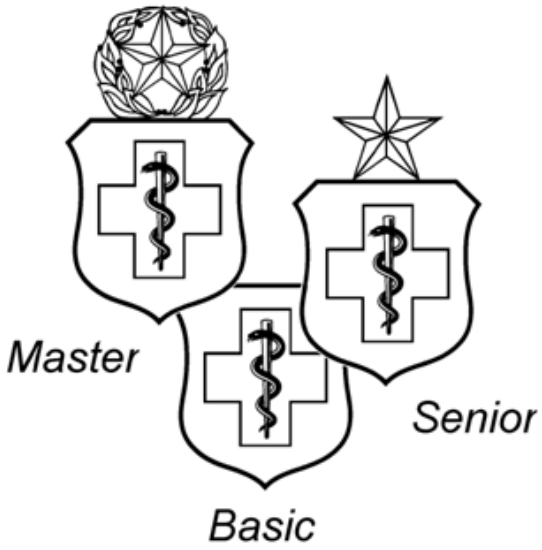
AFSC 4R0X1/A/B/C
DIAGNOSTIC IMAGING SPECIALTY



CAREER FIELD EDUCATION AND TRAINING PLAN

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DIAGNOSTIC IMAGING SPECIALTY
AFSC 4R0X1/A/B/C
CAREER FIELD EDUCATION AND TRAINING PLAN

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PART II

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PART I

Preface

1. This CFETP is a comprehensive education and training document that identifies life-cycle education and training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and will instill rigor in all aspects of career field training. **NOTE**: Civilians occupying associated positions will use Part II to support duty position qualification training.

2. The CFETP consists of two parts: supervisors plan, manage, and control training within the specialty using both parts of the plan.

2.1. Part I provides information necessary for overall management of the specialty. **Section A** explains how everyone will use the plan. **Section B** identifies career field progression information, duties and responsibilities, training strategies, and career field path. **Section C** associates each level with specialty qualifications (knowledge, education, experience, training, and other). **Section D** indicates resource constraints. Some examples are funds, manpower, equipment, facilities. **Section E** identifies transition training guide requirements for SSgt through MSgt.

2.2. Part II includes the following: **Section A** identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, AETC-conducted training, wartime course and core tasks, and correspondence course requirements. **Section B** contains the course objective list and training standards which supervisors will use to determine if Airmen satisfied training requirements. **Section C** identifies available support materials. An example is a Qualification Training Package (QTPs), which may be developed to support proficiency training. **Section D** identifies a training course index supervisors can use to determine resources available to support training. Included here are both mandatory and optional courses. **Section E** identifies MAJCOM unique training requirements supervisors can use to determine additional training required for the associated qualification needs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

3. Using guidance provided in the CFETP will ensure individuals in this specialty receive effective and efficient training at the appropriate points in their career. This plan will enable us to train today's work force for tomorrow's jobs.

ABBREVIATIONS AND TERMS EXPLAINED

Advanced Training (AT). Formal course that provides individuals who are qualified in one or more positions of their Air Force Specialty with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career Airmen at the advanced level of the Air Force Specialty.

Air Education and Training Command (AETC). Conducts basic training for all Air Force enlisted personnel, produces skilled flying and ground personnel, and trains many of the world's military forces. Along with basic military, technical, and flying training, AETC provides other types of training, such as aircrew transitional, special, advanced, lateral, and survival training.

Air Force Career Field Manager (AFCFM). The AFCFM is the Air Force (AF) focal point for the designated career field within a functional community. Serves as the primary advocate for the career field, addressing issues and coordinating functional concerns across various staffs. Responsible for the career field policy and guidance.

Air Force Specialty (AFS). A group of positions (with the same title and code) that require common qualifications.

Air Force Career Development Academy (AFCDA). Provides instructional opportunities for customers beyond the confines of the formal classroom. AFCDA has an enrollment, distribution, tracking, and testing system in place for distance learning courses.

Air Force Job Qualification Standard/Command Job Qualification Standard (AFJQS/CJQS). A comprehensive task list that describes a particular job type or duty positions used by supervisors to document task qualifications. The tasks on AFJQS/CJQS are common to all persons serving in the described duty position.

As Low As Reasonably Achievable (ALARA). Describes a management philosophy of taking action to keep radiation exposure of patients and health care workers at the lowest practical level consistent with current technology.

Allocation Curves. The relation of hours of training in different training settings to the degree of proficiency that can be achieved on specified performance requirements.

American Registry for Diagnostic Medical Sonography (ARDMS). The nationally recognized certification body for ultrasonographers. Certified professionals may use the title "Registered Diagnostic Medical Sonographer" and its abbreviation "RDMS". RDMS specialty areas include abdomen, obstetrics and gynecology, breast, and ophthalmology. "Registered Vascular Technologist" and its abbreviation "RVT", "Registered Diagnostic Cardiac Sonographer" and its abbreviation "RDCS", RDCS specialty areas include adult, pediatric, and fetal echocardiography. Noninvasive vascular technology is a specialty area in RVT.

American Registry of Radiologic Technologists (ARRT). The nationally recognized certification body for many radiologic science professionals. Certified professionals may use the title "Registered Technologist" and its abbreviation "R.T." after their name, along with the initial designating their certification specialty or subspecialty. Specialty certifications are offered for radiographers (R), nuclear medicine technologists (N), and radiation therapists (T). Subspecialty certifications are also offered in mammography (M), computed tomography (CT), magnetic resonance imaging (MR), cardiovascular-interventional technology (CV), bone densitometry (BM), sonography (S), vascular sonography (VS), and quality management (QM).

American Society of Radiologic Technologists (ASRT). The national professional organization for radiologic science professionals. Through its legislative body, the House of Delegates and its appointees to the educational accreditation and professional certification bodies, the ASRT sets policy and direction for the profession. A military chapter was established in 1995 giving military radiologic science professionals a voice in the organization and 9 votes (3 from each service) in the House of Delegates.

Career Development Course (CDC). Self-study correspondence course to provide Airmen with fundamental knowledge of their AFS.

Career Field Education and Training Plan (CFETP). A comprehensive, core training document that identifies all education and training for a career field. It is a diagram for professional military and career technical development. The CFETP's singular design unites the training efforts of AETC and the using MAJCOMs to eliminate waste and thereby defend training budget requirements.

Certification. A formal indication of an individual's ability to perform a task to required standards.

Certification Official. A person whom the commander assigns to determine an individual's ability to perform a task to required standards.

Continuation Training. Additional training exceeding requirements with emphasis on present or future duty assignments.

Core Task. Tasks the AFCFM identifies as minimum qualification requirements for everyone within an Air Force Specialty Code (AFSC), regardless of duty position. Core tasks may be specified for a particular skill level or in general across the AFSC. Guidance for using core tasks can be found in the applicable CFETP narrative.

Course Objective List (COL). A publication derived from initial/advanced skills course training standard, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-, 5-, 7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with AFI 36-2201, *Air Force Training Program*.

Digital Imaging and Communications in Medicine (DICOM). Standard for handling, storing, printing, and transmitting information in medical imaging.

Exportable Training. Additional training via computer software, paper text, interactive video, or any other necessary means to supplement training.

Hospital Information Systems (HIS). Comprehensive, integrated information system designed to manage all aspects of hospital operation.

Initial Skills Training. A formal school course which results in award of a 3-skill level AFSC for enlisted personnel.

Instructional System Development (ISD). A deliberate and orderly, but flexible process for planning, developing, implementing, and managing instructional systems. It ensures personnel are taught in a cost efficient way the knowledge, skills, and attitudes essential for successful job performance.

Initial Skills Training (IST). A formal resident course that results in award of the entry skill level.

Joint Review Committee (JRC). Educational review committees formed of representatives from the medical profession and the radiologic science profession that publish standards for and render accreditation decisions on educational programs in the radiologic sciences. The Joint Review Committee on Education in Radiologic Technology (JRCERT) accredits the 4R0X1 educational program.

Major Command (MAJCOM) Functional Manager (FM). A person appointed as the senior representative for an AFS within a specific MAJCOM. Among other responsibilities, MAJCOM FMs work with the AFCFM to develop, implement, and maintain the CFETP.

Nuclear Medicine Technology Certification Board (NMTCB). A nationally-recognized certification body sponsored by the Society of Nuclear Medicine (SNM). Certified nuclear medicine technologists may use the title "Certified Nuclear Medicine Technologist" and its abbreviation "CNMT" after their name. Certified nuclear cardiology technologists may use the title "Nuclear Cardiology Technologist" and its abbreviation "NCT" after their name.

Occupational Analysis Report (OAR). A detailed report showing the results of an occupational survey of tasks performed within a particular AFS.

On-the-Job Training (OJT). Hands-on, over-the-shoulder training conducted to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training.

Optimal Training. The ideal combination of training settings that result in the highest levels of proficiency on specified performance requirements in the minimum possible time.

Picture Archiving and Communication System (PACS). PACS is an independent network system consisting of communication and network, image database and storage, image acquisition, and image output and display within Diagnostic Imaging.

Qualification Training (QT). Hands-on performance-based training designed to qualify a trainee in a specific duty position. This training occurs both during and after upgrade training to maintain qualifications.

Qualification Training Package (QTP). An instructional package designed for use at the unit to qualify, or aid qualification in a position or program, on a piece of equipment or a performance item identified for competency verification within this CFETP. QTPs establish performance standards and are designed to standardize skills verification and validation of task competency. It may be printed, computer based, or other media.

Readiness Skills Verification Program (RSVP). Program designed to maintain war skill core competencies for all radiologic technologists in career field.

Resource Constraints. Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being delivered.

Radiology Information Systems (RIS). Networked software suite for managing medical imagery and associated data.

Skills Training. Training which results in the award of a skill level.

Special Experience Identifier (SEI). A three-number code that identifies unique skills not otherwise identified in the personnel data system.

Specialty Training. A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade Airmen in the award of a skill level.

Specialty Training Standard (STS). An Air Force publication that describes an Air Force specialty in terms of tasks and knowledge that an Airman in that specialty may be expected to perform or to know on the job. Also identifies the training provided to achieve a 3-, 5-, or 7-skill level within an enlisted AFS. It further serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools and correspondence courses.

Standard. An exact value, a physical entity, or an abstract concept, established and defined by authority, custom, or common consent to serve as a reference, model, or rule in measuring quantities or qualities, establishing practices or procedures, or evaluating results. A fixed quantity or quality.

Supplemental Training. Training toward a portion of an AFS without change by AFSC. Formal training on new equipment, methods and technology that are not suited for on-the-job training.

Total Force. All collective Air Force components (active, reserve, guard, and civilian elements) of the United States Air Force.

Trainer. A trained and qualified person approved by the commander to teach personnel to perform specific tasks through on-the-job methods.

Technical Reference (TR). Teaching material used in the design and development of lesson plans, curriculum and objectives in support of STS items.

Training Capacity. The capability of a training setting to provide training on specified requirements, based on the availability of resources.

Training Requirements Analysis. A detailed analysis of tasks for a particular AFS to be included in the training decision process.

Training Setting. The type of forum in which training is provided (formal resident school, on-the-job, field training, mobile training team, self-study, etc.).

Upgrade Training (UGT). Mandatory training which leads to attainment of a higher level of proficiency.

Utilization and Training Workshop (U&TW). A forum of MAJCOM AFS functional managers, subject matter experts, and AETC training personnel that determines career ladder training requirements.

Wartime Course. A course structured to train only essential tasks and to produce the greatest number of graduates in the least amount of time. The course content is based on wartime tasks identified in the STS.

Section A. General Information

4. Purpose. This CFETP provides the information necessary for AFCFM, MAJCOM Functional Managers (MFM), commanders, training managers, supervisors and trainers to plan, develop, manage, and conduct an effective and efficient career field training program. The plan outlines the training that individuals in this AFS should receive in order to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, advanced and proficiency training. IST is the AFS-specific training an individual receives upon entry into the AF or upon retraining into this specialty for award of the 3-skill level. Normally, this training is conducted by AETC at one of the technical training centers. UGT identifies the mandatory courses, task qualification requirements, and correspondence course completion requirements for award of the 3-, 5-, 7-, 9-skill level. QT is actual hands-on task performance training designed to qualify an Airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills and knowledge required to do the job. Advanced training is formal specialty training used for selected Airmen. Proficiency training is additional training, either in-residence or exportable advanced training courses, or OJT training provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes; some are:

4.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field-training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

4.2. Identifies task and knowledge training requirements for each skill level in the specialty and recommends education and training throughout each phase of an individual's career.

4.3. Lists training courses available in the specialty, identifies sources of training, and the training delivery method.

4.4. Identifies major resource constraints that impact full implementation of the desired career field training process.

5. Uses. This plan will be used by FMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty.

5.1. AETC training personnel will develop or revise formal resident, non-resident, field, and exportable training based upon requirements established by the users and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining resources needed to provide the identified training.

5.2. The MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade and proficiency requirements. OJT, resident training, contract training, or exportable courses can satisfy identified requirements. MAJCOM-developed training to support this AFS must be identified for inclusion into the plan.

5.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

6. Coordination and Approval of CFETP. The AFCFM is the approval authority. Also, the AFCFM will initiate an annual review of this document to ensure currency and accuracy. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. Using the list of courses in Part II, they will eliminate duplicate training.

Section B. Career Progression and Information

7. Specialty Description.

7.1. *Specialty Summary*. Operates equipment to produce diagnostic images and assists radiologist or physician with special procedures. Prepares equipment and patients for diagnostic studies and therapeutic procedures. Performs technical and administrative imaging activities. Ensures health protective measures such as standard and transmission-based precautions and radiation protection are established and employed. Assists the radiation oncologist. Manages diagnostic imaging functions and activities. Related DOD Occupational Subgroup: 131300.

7.2. Duties and Responsibilities.

7.2.1. Operates fixed and portable radiographic equipment to produce routine diagnostic medical images. Computes techniques and adjusts control panel settings such as kilovoltage, milliamperage, exposure time, and focal spot size. Positions patient to image desired anatomic structures. Selects image recording media, adjusts table or image receptor (cassette holder), aligns x-ray tube for correct distance and angle, and restricts radiation beam for maximum patient protection. Exposes and processes images.

7.2.2. Uses specialized equipment to perform nuclear medicine, mammography, sonography, computed tomography, and magnetic resonance imaging. Selects imaging protocols and required accessories, and makes adjustments based on the specific examination requirements. Records and processes the image. Manipulates the recorded image using computer applications.

7.2.3. Assists physicians with fluoroscopic, interventional, and special examinations. Instructs patients preparing for procedures. Prepares and assists with contrast media administration. Maintains emergency response cart. Assists physician in treating reactions to contrast material. Prepares sterile supplies and equipment. Operates accessory equipment such as automatic pressure injectors, and digital imagers, stereotactic biopsy devices, and vital signs monitoring equipment. Performs image subtraction and manipulation techniques.

7.2.4. Performs and supervises general diagnostic imaging activities. Cleans and inspects equipment and performs preventive maintenance. Receives patients, schedules appointments, prepares and processes examination requests and related records, and processes images and reports. Enters and maintains data in picture archiving and communication system (PACS), radiology information systems (RIS) and hospital information system (HIS). Assists with phase II didactic and performance training, evaluation and counseling of students, and maintenance of student academic records. Participates in formal research projects.

7.2.5. Establishes and maintains standards, guidelines, and practices. Composes protocols. Prepares routine positioning guides and technique charts. Reviews images to ensure quality standards are met. Performs equipment quality control checks. Monitors personnel to ensure protective procedures such as those in the As Low As Reasonably Achievable (ALARA) radiation safety, hazardous material communications, and Air Force occupational safety and health programs are followed. Performs tests on radiation protection equipment. Assesses staff competence, and monitors appropriateness of care and completeness of examination requests.

7.2.6. Plans, organizes, and supervises diagnostic imaging activities. Analyzes workload and establishes production controls and performance standards for administrative and technical activities. Coordinates on interdepartmental issues that interface with diagnostic imaging. Prepares and implements financial plan, and monitors and analyzes annual expenditures. Prepares equipment purchase requests and justifications. Monitors

equipment performance and preventive maintenance activities. Recommends new equipment procurement. Performs as the diagnostic imaging facility manager.

7.2.7. For leadership duty titles (supervisor and above) refer to AFI 36-2618, *Enlisted Force Structure*. Appropriate duty titles for personnel working in this specialty depends on rank and/or skill level. Individuals possessing the 3-skill level, regardless of rank, hold the duty title of Diagnostic Imaging (or Nuclear Medicine/Diagnostic Medical Sonography/Magnetic Resonance Imaging) Apprentice. Individuals possessing the 5-skill level, regardless of rank, hold the duty title of Diagnostic Imaging (or Nuclear Medicine/Diagnostic Medical Sonography/Magnetic Resonance Imaging) Journeyman. Individuals possessing the 7-skill level, regardless of rank, hold the title of Diagnostic Imaging (or Nuclear Medicine/Diagnostic Medical Sonography/Magnetic Resonance Imaging) Craftsman.

7.2.8. PACS Administrator (N-Prefix). PACS at teleradiology reading sites and/or regional archives require dedicated and trained diagnostic imaging personnel who meet AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, Chapter 2. MTF's with PACS network system will identify on their UMD, positions and applicable personnel with an "N" prefix. Training documentation will be accomplished in their STS as described starting with 8.4. Advanced PACS Administration (N Prefix) as well as attend vendor-specific training for their vendor PACS. The duties of a PACS network administrator should be reserved for SSgt-MSgt with 6-14 years Total Active Federal Military Service who are registry eligible with The ARRT. The PACS Administrator will report to the senior manager, Diagnostic Imaging Flight. The incumbent will receive general direction from Medical Information Systems (MIS) director the individual responsible for overseeing/coordinating existing and participating in new PACS and digital imaging initiatives. The new administrator will receive assignments in terms of overall objectives to be achieved, resources available, and priorities to be met. The PACS Administrator is expected to independently follow assignments to completion, and bear the responsibility to resolve problems in a manner consistent with the flight chief/Diagnostic Imaging senior management direction and approval. The PACS Administrator will act as a liaison in digital imaging initiatives within the department as well as interface with other departments to include MIS. Additionally, the PACS Administrator will assist with troubleshooting and PACS maintenance for connected teleradiology spoke sites. The PACS Administrator will be responsible for operating and capital budget requests for medical imaging equipment in conjunction with the, Diagnostic Imaging Senior Manager. The PACS Administrator is responsible for leading the operational, fiscal, and human resources assigned to them. The PACS Administrator is the on-site contracting officer's technical representative (COTR) to ensure compliance with all aspects/provisions of the DIN-PACS contract. The PACS Administrator is responsible for securing and maintaining network integrity, obtaining equipment and software certifications, and ensuring system security. In addition, the PACS Administrator serves as liaison between the medical group and the system vendor in facilitating software and hardware upgrades, service and repairs, and modifications of the facilities and hardware.

8. Skill and Career Progression. Adequate training and timely progression from the apprentice to the superintendent skill level play an important role in the Air Force's ability to accomplish its mission. It is essential that everyone involved in training do their part to plan, manage, and conduct an effective training program. The guidance provided in this part of the CFETP will ensure each individual receives viable training at appropriate points in their career.

8.1. Apprentice (3) Level. Initial skills training in this specialty consist of the task and knowledge training provided in Phase I and Phase II. The decision to train specific task and knowledge items is based on JRCERT accreditation requirements, review of OAR data, and 4R0X1X subject matter expert input. After completing initial skills training, apprentices will work with qualified diagnostic imaging journeymen, craftsmen, and radiologists to further enhance their knowledge and skills. Job assignments will normally include duties in diagnostic imaging service administration, routine clinical radiography, and/or assisting in special clinical radiography. The apprentice will enter upgrade training using the 4R051 CDC, and will receive OJT required for certification in all core tasks listed in the STS. The apprentice should devote their full time to learning the

medical field and the primary job. Completion of national certification in radiography by the ARRT at the earliest opportunity is highly recommended.

8.2. Journeyman (5) Level. Following completion of the prerequisites for upgrade to the 5-skill level, new journeymen should consider expanding their personal and professional horizons as they enter into continuation training. Job assignment possibilities widen to include more emphasis in special clinical radiography areas, duties as a preceptor/clinical instructor for Phase II students, duties in diagnostic imaging logistics, and first line supervisory duties in routine clinical radiography or diagnostic imaging service administration areas. Completion of continuing education requirements is mandatory for maintaining current ARRT certification. Attending computer training classes, completing requirements for the Community College of the Air Force (CCAF) Associate of Applied Science Degree in Radiologic Technology is strongly encouraged. The more senior journeyman may consider training into one of the SEI or AFSC shred areas as well as certain special duty assignments such as Technical Training Instructor duty. Individuals must have, or be able to complete requirements for an Associate Degree within 1 year following assignment to instructor duty. Additionally, all instructors must hold and maintain a national certification within their specialty. PACS administrators may be selected from this group. Active involvement in squadron and community activities is strongly encouraged. Individuals will begin preparation for promotion to Staff Sergeant under the Weighted Airman Promotion System (WAPS). Individuals will attend Airman Leadership School (ALS) upon selection for promotion to Staff Sergeant.

NOTE: Individuals who retrain into the 4R0X1 specialty should not be assigned management responsibilities until they have obtained the 5-skill level, regardless of rank.

8.3. Craftsman (7) Level. Upon selection for promotion to the grade of Staff Sergeant, journeymen may be entered into upgrade training for the 7-skill level (no earlier than the first day of the promotion cycle). Individuals must have been awarded the 5-skill level and be certified in all 5-level tasks within the capability of their institution. Craftsmen are expected to be knowledgeable and highly skilled in a wide variety of duties within the AFS. They may serve in supervisory, administrative, or management positions in the basic AFS areas, or in technical or supervisory positions in one of the subspecialty areas. PACS administrators, Phase II course supervisors, the career field technical writer, instructors and instructor supervisors at the technical training school are normally selected from this group of widely experienced technologists. By now, individuals should have completed the CCAF degree. Individuals are encouraged to continue college education toward a baccalaureate or advanced degree in a specialty directly related to the AFSC (radiologic technology or health sciences) or one that would prepare the individual for the higher level management positions in the AFSC (business administration, personnel management, or education). Craftsmen selected for promotion to Technical Sergeant will attend a Noncommissioned Officer Academy (NCOA). Active involvement in squadron, base, and community activities to help build leadership and management abilities is strongly encouraged.

8.4. Superintendent (9) Level. Superintendents are normally assigned to top level supervisory positions at the regional hospital or medical center level. College courses in the areas of financial and personnel management should be included in the education program as the individual completes a baccalaureate or advanced degree. Active involvement should continue in squadron, base, and community activities and in all levels of the career field's professional organizations with emphasis placed on assuming leadership roles of the Senior Noncommissioned Officer Academy (SNCOA) is required for all persons selected for promotion to Senior Master Sergeant.

9. Training Decisions. This CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Diagnostic Imaging Career Field. The spectrum includes a strategy for when, where, and how to meet these training requirements. Our strategy is apparent and affordable, eliminates duplication, and prevents a fragmented approach to training. The following decisions regarding

training within the 4R0X1 career field were made during the U&TW held at Fort Sam Houston, Texas, in April 2012. Training decisions made for this AFS have been, and must continue to be made with the full understanding of their impact on the external civilian accreditation of the programs.

9.1. Initial Skills. No major changes to initial skills training for 4R0X1 or shreds. Minor STS item changes included training reference changes, core task deletions, and proficiency level changes.

9.2. Five-Level Upgrade Requirements. No major changes

9.3. Seven-Level Upgrade Requirements. No major changes

9.4. Proficiency Training. QTP for MRI course will be discontinued due the addition of an Advance MRI course. In resident MRI course will award the 3 skill level. The 5-skill level upgrade requirements will be accomplished via OJT.

10. CCAF. Enrollment in CCAF occurs upon completion of basic military training. CCAF provides the opportunity to obtain an Associate of Applied Sciences Degree. Visit CCAF at Web Link http://www.au.af.mil/au/ccaf/ for additional information. In addition to its associate degree program, CCAF offers the following:

10.1. CCAF Instructor Certification (CIC) Program. CCAF offers the CIC Program for qualified instructors who teach CCAF collegiate-level credit awarding courses at a CCAF-affiliated school. The CIC is a professional credential that recognizes the instructor's extensive faculty development training, education and qualification required to teach a CCAF collegiate course and formally acknowledges the instructor's practical teaching experience. The program is a three-level program (CIC-I, CIC-II and CIC-III). Each level consists of increased or advanced requirements and achievements. It provides CCAF instructors a structured professional development track. The CIC Program replaced the CCAF Occupational Instructor Certification (OIC) Program, which officially closed on 1 January 2011. The CIC Program is managed and administered by the CCAF Credentialing Programs Flight (CCAF/DEAL). Coordinate all CIC nominations and refer any questions to CCAF/DEAL at DSN 749-5020 or E-Mail ccaf.deal@us.af.mil.

11. Degree Requirements. All Airmen are automatically entered into the CCAF program. Prior to completing an associate degree, the 5-skill level must be awarded and the following requirements must be met:

	Semester Hours
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective	15
Total	64

11.1. Technical Education (24 semester hours). A minimum of 12 semester hours of Technical Core subjects and courses must be applied and the remaining semester hours applied from Technical Core or Technical Elective subjects and courses.

Nuclear Medicine Technology 4R0X1A	
Technical Core	**Maximum Semester Hours**
American Registry of Radiologic Technologist Certification Nuclear Medicine Registry	24
Applied Nuclear Medicine Physics and Chemistry	9
CCAF Internship	18
Diagnostic Imaging, Clinical and Nonclinical Physics	24
Nuclear Medicine Instrumentation	18
Radiation Safety and Procedures	14
Radiopharmaceuticals	8
Technical Electives	
Computer Science	6

Diagnostic Medical Sonography 4R0X1B	
Technical Core	**Maximum Semester Hours**
American Registry of Radiologic Technologist Certification	24
CCAF Internship	18
Clinical Sonography Practicum I	8
Clinical Sonography Practicum II	18
Diagnostic Sonography	6
Sonographic Scanning	10
Technical Electives	
Computer Science	6

Diagnostic Imaging Technology 4R0X1/4R0X1C	
Technical Core	**Maximum Semester Hours**
American Registry of Radiologic Technologists Certification	24
CCAF Internship	18
Diagnostic Imaging Anatomy & Physiology	6
Diagnostic Imaging Clinical Practicum	12
Diagnostic Imaging Physics	6
Diagnostic Imaging Positioning	6
Diagnostic Imaging Procedures	8
Diagnostic Imaging Technique & Darkroom Procedures	6
Introduction to Diagnostic Imaging Technology	6
Technical Electives	
Advanced Diagnostic Imaging Procedures	12
Computer Science	6
Diagnostic Imaging Clinical Education/Internship	12
Medical Readiness	3

11.2. **Leadership, Management, and Military Studies (6 Semester hours)**. Professional military education, civilian management courses accepted in transfer and/or by testing credit.

11.3. Physical Education (4 Semester Hours). This requirement is satisfied by completion of basic military training.

11.4. General Education (15 Semester hours). Applicable courses must meet the criteria for application of courses to the General Education Requirements (GER) and be in agreement with the definitions of applicable General Education subject/courses as provided in the *CCAF General Catalog.*

11.5. Program Elective (15 Semester Hours). Satisfied with applicable Technical Education; Leadership, Management, and Military Studies; or General Education subjects and courses, including natural science courses meeting GER application criteria. Nine (9) semester hours of CCAF degree applicable technical credit otherwise not applicable to this program may be applied. See the *CCAF General Catalog* for details regarding the Associates of Applied Sciences degree for this specialty.

11.6. Additional Information. Off-duty education is highly encouraged for professional development. Individuals desiring to become AETC instructors must possess as a minimum an associate degree or be within 1 year of completion (45 semester hours). A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

12. Career Field Path.

Figure 5-1. Enlisted Career Pyramid

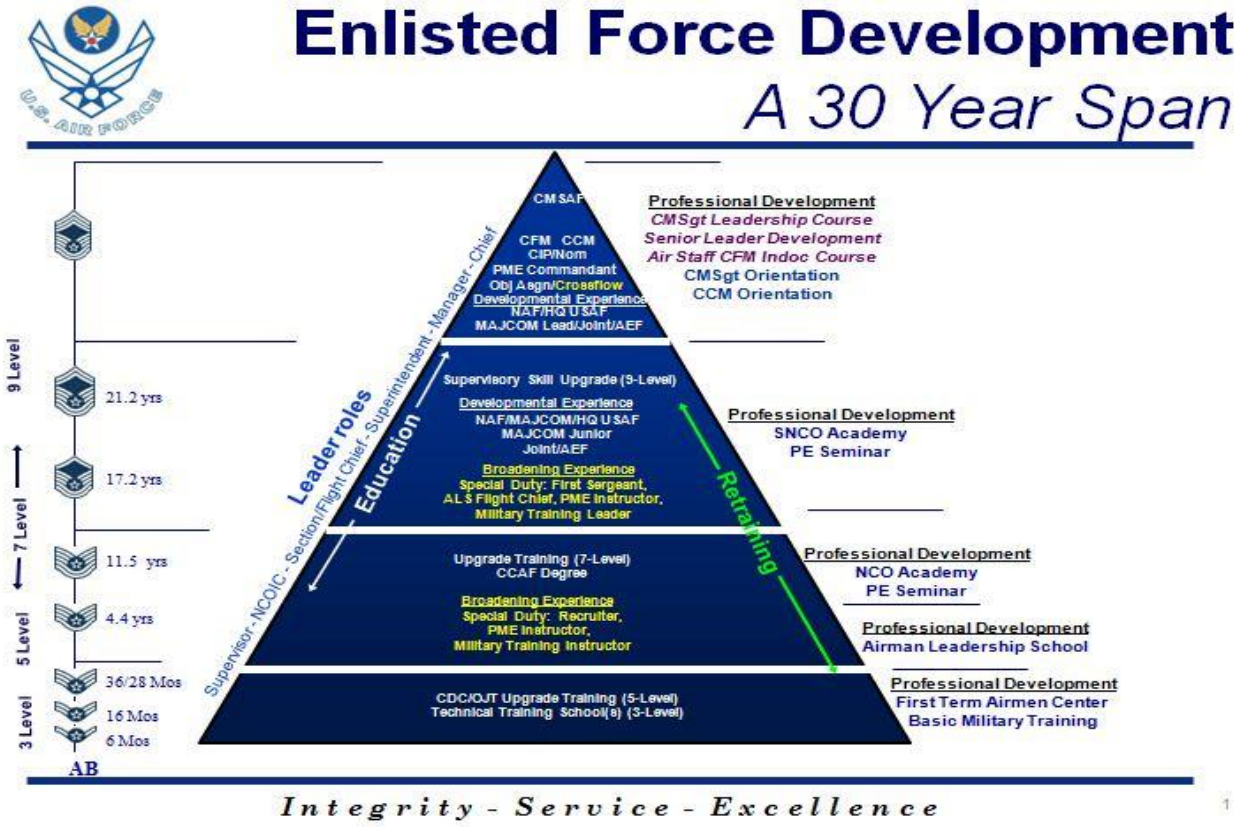
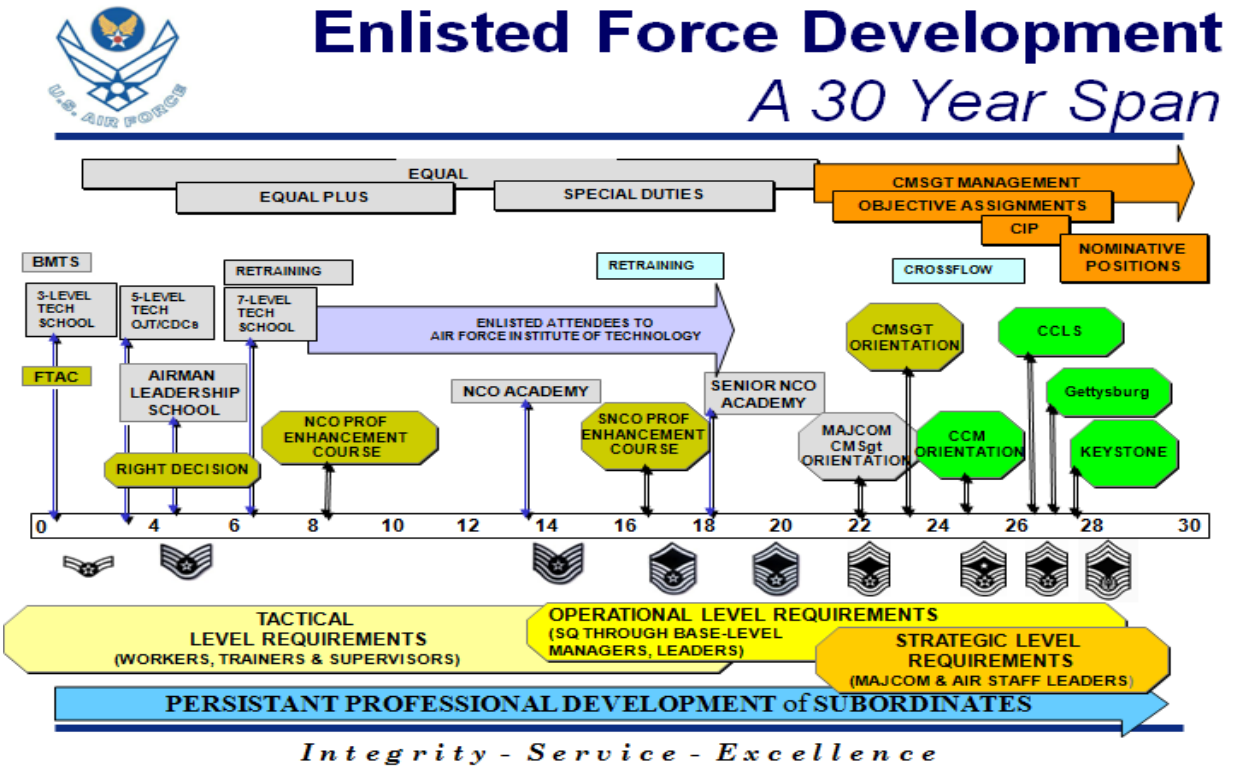


Figure 5-2. Enlisted Education and Training Path



Section C Skill Level Training Requirements

13. Purpose. Skill level training requirements in this specialty are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II, Section A and B of this CFETP.

13. Specialty Qualification.

13.1. Apprentice Level (3-Skill Level) Training:

13.1.1. Knowledge. 4R031/A/B/C. Human anatomy and physiology; medical terminology and ethics; legal aspects of medicine; healthcare accreditation standards; radiation physics, biology, and protection; basic electronics theory; techniques of operating x-ray and specialized diagnostic imaging equipment; radiographic positioning; patient care and monitoring techniques; image recording media and processing techniques; quality control procedures; aseptic and sterile techniques; reactions to contrast media; cardiopulmonary resuscitation; methods of recording the fluoroscopic image; patient and equipment safety budget preparation and execution; and medical records administration.

NOTE: SHREDS. Reinstatement of the 4R0X1 as the primary AFSC will be considered after the member has served at least 3 years at the 5/7 skill level of his/her particular shred and sewn on MSgt. A letter must be submitted with concurrence from flight commander and flight section chief, and sent to the MFM.

13.1.1.1. 4R031A. Algebra, nuclear physics, clinical chemistry, nuclear pharmacology, and Nuclear Regulatory Commission regulations concerning use of radionuclides.

13.1.1.2. 4R031B. Ultrasound physics; techniques of operating specialized ultrasound components and equipment; basic knowledge of vascular and abdominal anatomy (topical and sectional), including normal variant anatomy, obstetric anatomy, and abnormal anatomy; and transducer characteristics, differences, and use.

13.1.1.3. **4R031C.** Magnetic physics, magnetism, magnetic safety, and radio frequency; techniques of operating MRI equipment; and advanced knowledge of sectional anatomy applicable to MRI.

13.1. 2. Education. For entry into this specialty, completion of high school or general education development equivalency with successful completion of courses in algebra, and biology or general science are mandatory. Successful completion of high school or collegiate courses in chemistry and physics is desirable.

13.1. 3. Training.

13.1.3.1. Diagnostic Imaging. For award of 4R031AFSC, completion of the diagnostic imaging apprentice course Phase I (L8AQJ4R03101AA) and Phase II (L5ABO4R03102AA) is mandatory.

13.1. 3.2. Nuclear Medicine (A-Shred). Completion of course (L9ALJ4R03101AA), Nuclear Medicine Phase I and (L5ABO4R031A02AA), Nuclear Medicine Phase II, is mandatory for the award of the 3-skill level in the A-shred.

13.1. 3.3. **Ultrasound (B-shred**). Completion of course (J3AQR4R031B01AA), Diagnostic Ultrasound Phase I and (L5ALO4R031B02AA), Diagnostic Ultrasound Phase II, is mandatory for award of the 3-skill level in the B-shred 4R031B. Completion of a diagnostic medical sonography phase II course.

13.1. 3.4. Magnetic Resonance Imaging (C-shred). Completion of (L5ALO4R031C00AA) course is required for award of the 3-skill level in the C-shred. Individuals must apply and be selected for retraining into the C-shred prior to beginning training.

13.1.3.5. PACS Administrators (N-Prefix). Individuals will complete the standardized AF 797, *Job Qualification Standard Continuation/Command JQS* for PACS Administrators as well as any locally determined training specific to the PACS system they will be managing. Training will be documented on the Diagnostic Imaging standardized AF Form 797. (Maintained by the PACS advisor and posted on the Knowledge Exchange Web Site)

13.13.6. Mammography. Personnel performing mammography duties must possess a 5 skill level, be registered in radiography through the ARRT and meet all other training/experience requirements specified in the Mammography Quality Standards Act. All technologists completing the AF Mammography Course will be assigned the 460 SEI.

13.1.4. Experience. N/A

13.1.4.1. Selection for diagnostic imaging shred-out training (Nuclear Medicine/4R0X1A, Ultrasound /4R0X1B, and Magnetic Resonance Imaging/4R0X1C) requires at a minimal, 12 months (24 months preferred) experience as a 5-skill level diagnostic imaging technologist prior to acceptance into the shred training course.

13.1.4.2. Selection for PACS Administrator (N-Prefix) duty requires possession of the 7-skill level and minimum rank of SSgt, (TSgt preferred). Individuals should possess a thorough knowledge of and aptitude for working with information systems.

13.1.5. Other. Minimum age of 18 years is required for entry into training for this AFSC. For award and retention of these AFSCs, must maintain an Air Force Network License according to AFI 33-115, Volume 2, *Licensing Network Users and Certifying Network Professionals.*

13.2. Training Sources and Resources. Completion of the diagnostic imaging apprentice course Phase I (L8AQJ4R03101AA) and Phase II (L5ABO4R03102AA) satisfies the training requirements specified in the specialty qualification section (above) for award of the 3-skill level.

13.3. Implementation. Apprentice (3-skill level) training begins with entry in the diagnostic imaging apprentice course (Phase I). Satisfactory completion of the course (Phase I and Phase II) results in award of the 3-skill level. Job qualification training starts when graduates are assigned to their first duty position. Thereafter, it is initiated any time an individual is assigned duties he/she is not qualified to perform.

13.4. Journeyman (5-Level) Training Requirements.

13.4.1. Specialty Qualification.

13.4.1.2. Knowledge. Human anatomy and physiology; medical terminology and ethics; legal aspects of medicine; healthcare accreditation standards; radiation physics, biology, and protection; basic electronics theory; techniques of operating x-ray and specialized diagnostic imaging equipment; radiographic positioning; patient care and monitoring techniques; image recording media and processing techniques; quality control procedures; aseptic and sterile techniques; reactions to contrast media; cardiopulmonary resuscitation; methods of recording the fluoroscopic image; patient and equipment safety; budget preparation and execution; and medical records administration.

13.4.1.3. Education. N/A

13.4.1.4. Training. For the basic AFSC, SEI and all shred-outs, the following actions are required for award of the 5-skill level AFSC:

(a) Completion of CDC 4R051;
(b) Complete all STS core tasks (identified by an asterisk [*] in column 1 of the STS;
(c) Complete all STS tasks for the assigned duty position;
(d) Complete at least 12 months OJT (9 months for retrainees); supervisor recommendation and commander approval.
(e) Reserve component are allowed and highly encouraged to participate in seasoned training after Phase II.

13.4.1.5. Experience.

13.4.1.5.1. 4R0X1. Qualification and possession of AFSC 4R031. Also, experience operating x-ray equipment, and producing and processing radiographs.

13.4.1.5.2. 4R051A/B/C. Prior qualification in and possession of AFSC 4R031A/B/C respectively. Also, experience performing applicable shred (nuclear medicine, ultrasound, or magnetic resonance imaging) functions and activities.

13.4.1.6. Other. For award and retention of these AFSCs, must maintain an Air Force Network License according to AFI 33-115, Volume 2, *Licensing Network Users and Certifying Network Professionals.*

13.4.2. Training Sources and Resources. Completion of CDC 4R051, Diagnostic Imaging Journeyman, satisfies the knowledge requirements specified in the specialty qualification section (above) for award of the 5-skill level. The STS identifies all core tasks required for qualification. Upgrade and qualification training are provided by qualified trainers using available resources.

13.4.3. Implementation. Entry into 5-skill level upgrade training is initiated upon arrival at the first permanent duty station, following graduation from Phase II training. Qualification training is initiated anytime an individual is assigned duties he/she is not qualified to perform.

13.5. Craftsman (7-Level) Training Requirements.

13.5.1. Specialty Qualification.

13.5.1.1. Knowledge. Human anatomy and physiology; medical terminology and ethics; legal aspects of medicine; healthcare accreditation standards; radiation physics, biology, and protection; basic electronics theory; techniques of operating x-ray and specialized diagnostic imaging equipment; radiographic positioning; patient care and monitoring techniques; image recording media and processing techniques; quality control procedures; aseptic and sterile techniques; reactions to contrast media; cardiopulmonary resuscitation; methods of recording the fluoroscopic image; patient and equipment safety budget preparation and execution; medical records administration; and department administration and management.

13.5.1.2. Education. N/A

13.5.1.3. Training. The following actions are required for award of the 7-skill level AFSC: (a) be trained on all STS core tasks (identified by an asterisk (*) in column 1 of the STS), (b) be trained on all STS tasks for the

assigned duty position, (c) minimum grade of SSgt, (d) complete at least 12 months upgrade training (6 months if retraining).

13.5.1.4. Experience.

13.5.1.4.1. 4R071. Prior qualification and possession of AFSC 4R051. Also, experience performing or supervising functions such as producing radiographs, assisting with fluoroscopy and special radiographic procedures, or treating disease by radiotherapy.

13.5.1.4.2. 4R071A/B/C. Prior qualification in and possession of AFSC 4R051A/B/C respectively. Also, experience performing or supervising nuclear medicine, ultrasound, or MRI functions and activities.

13.5.1.5. Other. For award and retention of these AFSCs, must maintain an Air Force Network License according to AFI 33-115, Volume 2, *Licensing Network Users and Certifying Network Professionals.*

13.5.2. Training Sources and Resources. The STS identifies all core tasks required for qualification. Upgrade and qualification training are provided by qualified trainers using technical references listed in the STS, Part II, Section A of this CFETP.

13.5.3. Implementation. Entry into 7-skill level upgrade training is initiated when an individual possesses the 5-skill level and is selected for promotion to the grade of Staff Sergeant. Upgrade training may begin on the first day of the first month of the promotion cycle in which the individual has been selected for promotion. Qualification training is initiated anytime an individual is assigned duties he/she is not qualified to perform. Completion of the 7-skill level course and all its prerequisites is required prior to award of the 7-skill level.

13.6. Superintendent (9-Level) Training Requirements.

13.6.1. Specialty Qualification.

13.6.1.1. Knowledge. Human anatomy and physiology; medical terminology and ethics; legal aspects of medicine; healthcare accreditation standards; radiation physics, biology, and protection; basic electronics theory; techniques of operating x-ray and specialized diagnostic imaging equipment; radiographic positioning; patient care and monitoring techniques; image recording media and processing techniques; quality control procedures; aseptic and sterile techniques; reactions to contrast media; cardiopulmonary resuscitation; methods of recording the fluoroscopic image; patient and equipment safety; budget preparation and execution; medical records administration; medical service organization and function, medical administrative procedures; personnel management and administration, Nuclear Regulatory Commission regulations governing medical use of radioisotopes, applicable environmental protection standards, management of non-military personnel, applicable accreditation standards and inspection procedures.

13.6.1.2. Education. N/A

13.6.1.3. Training. N/A

13.6.1.4. Experience. Prior qualification in and possession of AFSC 4R071, 4R071A, 4R071B, or 4R071C. Also, experience managing radiologic, nuclear medicine, ultrasound, or MRI functions and activities; mandatory experience of medical service organization and function, medical administrative procedures, medical supply procedures, medical equipment management procedures, personnel management and administration, Nuclear Regulatory Commission regulations governing medical use of radioisotopes, applicable environmental

protection standards, management of non-military personnel, applicable accreditation standards and inspection procedures, and preparation and execution of budgets.

13.6.1.5. Other. For award and retention of these AFSCs, must maintain an Air Force Network License according to AFI 33-115, Volume 2.

13.6.2. Training Sources and Resources. Required PME and intermediate qualifications.

13.6.3. Implementation. Entry into 9-skill level training is initiated when an individual is selected for SMSgt, and is a fully qualified 7-skill level. Qualification training is initiated any time an individual is assigned duties they are not certified to perform.

Section D. Skill Resource Constraints

14. **Purpose.** This section identifies known resource constraints, which preclude optimal and desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, and target completion dates. Resource constraints will be, as a minimum, reviewed and updated annually.

14.1. There are currently no resource constraints. This area is reserved.

Section E. Transitional Training Guide

15. There are currently no transition training requirements. This area is reserved.

Part II

Section A - Specialty Training Standard (STS)

16. Implementation. This STS will be used for technical training provided by HQ AETC.

16.1. Purpose. As prescribed in AFI 36-2201.

16.1.1. Lists, in column 1, the most common tasks, knowledge, and technical references (TR) necessary for Airmen to perform duties in the 3-, 5-, and 7-skill level. TRs in the source summary are commercial publications or other service publications that are essential for OJT and mission accomplishment and are referenced by title throughout the STS. The unit OJT section will consolidate the requirements for the unit supported and order publications through the hospital/clinic library activity. Column 1 identifies, with an asterisk (*), those task/knowledge items that are trained during the resident wartime course. Column 2 identifies core tasks, per skill level (i.e. “5” or “7”), for UGT requirements.

16.1.2. Provides certification for OJT. Column 3 is used to record completion of task training requirements and knowledge training requirements. Automated training management systems to document technician qualifications, will be used. Task certification must show a certification/completed date. (NOTE: As a minimum, use the following column designators: Training Complete, Certifier Initials).

16.1.3. Shows formal training and correspondence course requirements. Column 3 shows the proficiency to be demonstrated on the job by the graduate as a result of training on the task/knowledge and the career knowledge

provided by the correspondence course. See CADRE/AFSC/CDC listing maintained by the unit training manager for current CDC listings.

16.1.4. Qualitative Requirements. Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

16.1.5. Use to document task when placed in AF Form 623, *Individual Training Record*, and used according to AFI 36-2201. Refer to AFI 36-2201 for further guidance on documentation, transcribing, decertification, and recertification.

16.2. Documenting Career Knowledge. When a CDC is not available, the supervisor identifies STS training references that the trainee requires for career knowledge in accordance with (IAW) AFI 36-2201 and ensures, as a minimum, that trainees cover all mandatory items specified in AFMAN 36-2108. For two-time CDC exam failures, the unit commander will take appropriate action IAW AFI 36-2201**. NOTE:** Career knowledge must be documented prior to submitting a CDC waiver.

16.3. Promotion. The STS is a guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the AETC Airman Advancement Division, by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are in Chapter 1 of AFI 36-2605, AF Military Personnel Testing System. WAPS is not applicable to the ANG.

16.4. Maintaining Core Task Certification. Personnel working in the shred AFSCs (4R0X1A/B/C) must work a minimum of 2 weeks (10 duty days) per year performing basic radiography functions in order to maintain proficiency in wartime skills. In addition, shred personnel must be recertified every 2 years on all core tasks identified in the basic AFSC STS. This requirement is waived for shred personnel filling a special duty position assigned outside of a medical treatment facility.

16.5. Recommendations. Report unsatisfactory performance of individual course graduates, inadequacies and recommended changes to this training standard to the 937 TRG/TGE, 2931 Harney, Fort Sam Houston, TX 78234 or use the Customer Service Information Line, DSN 420-1080 (commercial 210-808-1080) to report your findings. Be sure to reference specific STS paragraphs in the report.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

THOMAS W. TRAVIS
Lieutenant General, USAF, MC, CFS
Surgeon General

6 Attachments
1. Qualitative Requirements
2. Diagnostic Imaging Specialty
3. Nuclear Medicine, A Shred
4. Ultrasound, B Shred
5. Magnetic Resonance Imaging, C Shred
6. Bibliography and Cross Talk Listing of 4R0X1 Training References

Attachment 1
Diagnostic Imaging Specialty STS

This Block Is For Identification Purposes Only		
Name Of Trainee		
Printed Name (*Last, First, Middle Initial*)	**Initials (Written)**	**SSAN** *(last 4)*
Printed Name Of Trainer, Certifying Official And Written Initials		
N/I	*N/I*	
N/I	*N/I*	
N/I	*N/I*	
N/I	*N/I*	
N/I	*N/I*	
N/I	*N/I*	
N/I	*N/I*	
N/I	*N/I*	

QUALITATIVE REQUIREMENTS

Proficiency Code Key		
	Scale Value	**Definition: The individual**
Task Performance Levels	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (Extremely Limited)
	2	Can do most parts of the task. Needs only help on hardest parts. (Partially Proficient)
	3	Can do all parts of the task. Needs only a spot check of completed work. (Competent)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (Highly Proficient)
*Task Knowledge Levels	a	Can name parts, tools, and simple facts about the task. (Nomenclature)
	b	Can determine step by step procedures for doing the task. (Procedures)
	c	Can identify why and when the task must be done and why each step is needed. (Operating Principles)
	d	Can predict, isolate, and resolve problems about the task. (Advanced Theory)
**Subject Knowledge Levels	A	Can identify basic facts and terms about the subject. (Facts)
	B	Can identify relationship of basic facts and state general principles about the subject. (Principles)
	C	Can analyze facts and principles and draw conclusions about the subject. (Analysis)
	D	Can evaluate conditions and make proper decisions about the subject. (Evaluation)

Explanations:
* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)
** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.
- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.
X This mark is used alone in the course columns to show that training is required but not given due to limitations in resources.

***NOTE**:* All tasks and knowledge items shown with a proficiency code are trained during war time.

Attachment 2
Diagnostic Imaging Specialty

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
1. CAREER LADDER PROGRESSION										
1.1 USAF Medical Service TR: AFMS Knowledge Exchange (https://kx2.afms.mil/); AFPD 44-1							A	-	-	-
1.1.1 Mission							A	-	-	-
1.1.2 Organization							A	-	-	-
1.2 The Airman career ladder and educational opportunities TR: CFETP 4R0X1 AFIs 36-2304, 36-2306; 36-2101, 36-2618, 36-2502, 36-2406, 36-2903, 36-2905, 36-2906, 36-2909							A	-	-	-
1.3 Progression in career ladder 4R0X1 TR: CFETP 4R0X1; AFI 36-2101							A	-	-	-
1.4 Duties of AFSCs 4R031/51/71 TR: CFETP 4R0X1; AFI 36-2101							A	-	-	-
2. MEDICAL READINESS Initial Medical Readiness training, directed by AFI 41-106, is provided in the Emergency Medical Readiness course conducted at the 937 Training Group, JBSA Ft Sam Houston Texas. Completed training is documented on AF Form 1098 for each course graduate. Continuing/on-going Medical Readiness training for the individual is the responsibility of each medical facility.							-	-	-	-
3. AF OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM TR: AFI 91-202;; AFI 41-203										
3.1 AFOSH Standards for AFSC 4R0X1							-	A	B	-
3.2 AF Radiation Protection TR: Radiologic Science for Technologists most current version; Merrill's Atlas of Radiographic Positions and Radiologic Procedures; AFMAN 48-125; AFI 48-148							A	A	B	-
3.3 Perform radiation protection procedures TR: Radiologic Science for Technologists most current version; Merrill's Atlas of Radiographic Positions and Radiologic Procedures; AFMAN 48-125; AFI 48-148	*						2b	3c	c	-
3.4 Radiology environmental management issues							-	-	A	-
4. SUPERVISION OF MILITARY AND NON-MILITARY PERSONNEL										
4.1 Orient new personnel TR: AFI 36-2201; AFPC Web site Search "Enlisted Classification"; CFETP 4R0X1							-	-	-	-
4.2 Assign personnel to duty position (UMD, UPMR, mobility, UTC, etc.)							-	-	-	-
4.3 Plan work assignments and priorities							-	-	-	-
4.4 Schedule work assignments and priorities							-	-	-	-
4.5 Establish work methods and performance standards (OIs, policies, protocols, etc.) TR: AFI 44-102; AFPC Web site Search							-	-	-	-

"Enlisted Classification" CFETP 4R0X1										
1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng	Trng	Trainee	Trainer	Task Certifier Initials	Phase I	Phase	CDC	OJT
4.6 Evaluate work performance of subordinate personnel TR: AFI 36-2406							-	-	-	-
5. Training TR: AFI 36-2201										
5.1 Evaluate personnel to determine need for training							-	-	-	-
5.2 OJT Management							-	-	-	-
5.2.1 Prepare job qualification standards							-	-	-	-
5.2.2 Conduct training							-	-	-	-
5.2.3 Counsel trainees on their progress							-	-	-	-
5.3 Monitor effectiveness of:							-	-	-	-
5.3.1 Career knowledge upgrade training							-	-	-	-
5.3.2 Job proficiency upgrade training							-	-	-	-
5.3.3 Qualification training							-	-	-	-
5.4 Maintain training records							-	-	-	-
5.5 Evaluate effectiveness of training programs							-	-	-	-
6 IMAGING PROPERTY REQUIREMENTS TR: AFI 41-209										
6.1 Categories of medical equipment and supply							-	-	A	-
6.2 Process requests for medical materials and services							-	-	a	-
6.3 Property accountability and responsibility							A	-	A	-
6.4 Report of survey system							-	-	B	-
7 PERFORMS ANALOG IMAGE LIBRARY FUNCTIONS TR: AFI 33-364; AFRIMS Web site										
7.1 Prepares master folder							-	1a	-	-
7.2 Prepares sub folder							-	1a	-	-
7.3 Files folders in terminal digit sequence							-	2b	-	-
7.4 Retrieves file folders							-	2b	-	-
7.5 Perform search procedures for misplaced files							-	-	b	-
7.6 Perform film loan procedures							-	-	b	-
7.7 Perform film transfer procedures							-	-	b	-
7.8 Maintains radiologic film files							-	2b	b	-
7.8.1 Dispose film files							-	-	a	-
7.8.2 Mammography image files							-	-	b	-
7.8.3 Occupational/asbestos image files							-	-	b	-
7.8.4 Final type image files							-	b	b	-
7.8.5 Sensitive (medical-legal) image files							-	-	b	-
7.8.6 Teaching image files							-	-	b	-
7.8.7 Radiography reports							-	c	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
8. DIGITAL IMAGING FUNCTIONS (PACS), IMAGING INFORMATION SYSTEMS, HOSPITAL INFORMATION SYSTEMS TR: AFI 41-211; Digital Radiography and PACS (Current Ed)										
8.1 Picture Archiving and Communication Systems (PACS)										
8.1.1 System Overview (terminology/topology)							A	A	B	-
8.1.2 Hospital Information System/ Radiology Information Systems (HIS/RIS)							A	A	A	-
8.1.3 Image Acquisition (modality, gateway, PACS, workstation, archive)							A	A	A	-
8.1.4 System Downtime Procedures							A	A	B	-
8.2 Digital Imaging Process							-	-	-	-
8.2.1 Query Modality Worklist							a	2b	-	-
8.2.2 Transmit exams (PACS, 3D, QC)							a	2b	-	-
8.2.3 Perform Image Manipulation							a	2b	-	-
8.2.4 Verify Transmission							a	2b	-	-
8.2.5 Export to Media							a	2b	-	-
8.3 PACS Administration										
8.3.1 Configure:							-	-	-	-
8.3.1.1 Modality Destination							-	-	-	-
8.3.1.2 PACS Routing							-	-	-	-
8.3.1.3 Telerad							-	-	-	-
8.3.1.4 Archive							-	-	-	-
8.3.1.5 Workstations							-	-	-	-
8.3.2 Troubleshooting							-	-	-	-
8.3.2.1 Perform DICOM Image test							-	-	-	-
8.3.2.2 Check Services							-	-	-	-
8.3.2.3 Identify Transmission Failures							-	-	-	-
8.3.3 Exam Maintenance							-	-	-	-
8.3.3.1 Splitting							-	-	-	-
8.3.3.2 Merging							-	-	-	-
8.3.3.3 Deleting							-	-	-	-
8.3.3.4 Perform Query/Retrieve							-	-	-	-
8.3.4 Manage User Profiles										
8.3.4.1 Create							-	-	-	-
8.3.4.2 Modify							-	-	-	-
8.3.4.3 Delete							-	-	-	-
8.3.5. Manage Quality Control on:							-	-	-	-
8.3.5.1 Processor/Imaging Plates							-	-	-	-
8.3.5.2 Workstation monitors							-	-	-	-
8.3.6 Import external studies							-	-	-	-
8.3.7 Manage System Backups										

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
8.3.7.1 Verify Backup Ran							-	-	-	-
8.3.7.2 Store Backup media							-	-	-	-
8.3.8 Maintain Databases										
8.3.8.1 Run checklists							-	-	-	-
8.3.8.2 Review checklist results							-	-	-	-
8.3.9 Boot up system							-	-	-	-
8.3.10 Shutdown system							-	-	-	-
8.3.11 Start/Stop/Restart Processes							-	-	-	-
8.4. Advanced PACS Administration (N Prefix)										
8.4.1 Manage Telerad Connections							-	-	-	-
8.4.2 Perform Image Fix ups							-	-	-	-
8.4.3 Image Recovery							-	-	-	-
8.4.4 Report Recovery							-	-	-	-
8.4.5 Remote Telerad Support							-	-	-	-
8.4.5.1 Troubleshooting							-	-	-	-
8.4.5.2 Configuration							-	-	-	-
8.4.6 Operating System Training Courses (PACS System Specific)							-	-	-	-
8.4.7 Manage System Performance							-	-	-	-
8.4.7.1 Prioritize exam storage							-	-	-	-
8.4.7.2 Prioritize Exam retrieval							-	-	-	-
8.5 IDC Administration										
8.5.1 Data Synchronization							-	-	-	-
8.5.1.1 Split studies							-	-	-	-
8.5.1.2 Merged studies							-	-	-	-
8.5.1.3 Segmented studies							-	-	-	-
8.5.1.4 Add object/presentation state							-	-	-	-
8.5.1.5 DICOM attribute changes							-	-	-	-
8.5.1.6 Object deleted							-	-	-	-
8.5.2 Manage										
8.5.2.1 Patients							-	-	-	-
8.5.2.2 Studies							-	-	-	-
8.5.2.3 Series							-	-	-	-
8.5.2.4 Images							-	-	-	-
8.5.3 Delete objects							-	-	-	-
8.5.4 Restore objects							-	-	-	-
8.5.5 Maintain Database										
8.5.5.1 Run checklists							-	-	-	-
8.5.5.2 Review checklist results							-	-	-	
8.5.6 Boot up system							-	-	-	-
8.5.7 Shutdown system							-	-	-	-
8.5.8 Restart system							-	-	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
9. IMAGING SERVICE ADMINISTRATION										
9.1 Process imaging requests	*						-	2b	-	-
9.2 JRCERT Accreditation requirements							A	-	-	-
9.3 Process improvement in radiology TR: AFI 44-119							-	-	-	-
10. TECHNICAL ASPECTS OF RADIOLOGY TR: Radiologic Science for Technologists (Current Ed)										
10.1 Radiation physics							B	B	B	-
10.2 X-Ray imaging systems							B	-	B	-
10.3 X-Ray production							B	B	B	-
10.4 Operate fixed and mobile radiographic equipment							2b	3c	c	-
10.5 Radiobiology							A	B	B	-
10.6 Beam Restriction							B	B	B	-
10.7 Control scatter radiation	*						2b	3b	c	-
10.8 Grids							B	B	B	-
10.9 Film printing							-	-	-	-
11. IMAGE ACQUISITION TR: Radiologic Science for Technologists (Current Ed)										
11.1 Characteristics of film and screen							B	-	B	-
11.2 Select prime exposure factors	*						2b	3b	c	-
11.3 Image quality evaluation							A	B	B	-
11.4 Employ appropriate beam-part-receptor alignment							2b	3c	c	-
11.5 Digital radiography										
11.5.1 Computed radiography (CR)							B	B	B	-
11.5.2 Acquire images using computed radiography (CR)							2b	2b	b	-
11.5.3 Direct radiography (DR)							A	B	B	-
11.5.4 Acquire images using direct radiography (DR)							-	-	b	-
11.6 Image intensified fluoroscopy							A	B	B	-
11.7 Digital fluoroscopy							B	B	B	-
12. IMAGE PROCESSING TR: Radiologic Science for Technologists (Current Ed)										
12.1 Film processing							A	-	A	-
12.2 Digital imaging process concepts							B	B	B	-
12.3 Process digital images							2b	3c	c	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
13. QUALITY MANAGEMENT TR: Radiologic Science for Technologists (Current Ed); Quality Management in the Imaging Sciences (Current Ed)										
13.1 Quality assurance							A	-	B	-
13.2 Quality control										
13.2.1 Monitoring equipment performance							a	2b	b	-
13.2.2 Inspect image receptors							a	3b	c	-
13.2.3 Perform lead protective devices check							-	2b	-	-
13.2.4 Perform image quality control							1a	2b	c	
13.3 Clean image receptors							a	2b	c	-
13.4 Perform repeat image analysis							-	-	c	-
13.5 Radiographic Film Critique							B			
14. ANATOMY, PHYSIOLOGY, AND PATHOLOGY TR: Principles of Anatomy and Physiology (Current Ed)										
14.1 Medical Terminology										-
14.1.1 Root, prefix, and suffix							B			-
14.1.2 Common medical terms							A			-
14.2 Body Planes and Positioning							A			-
14.3 Organization of the body							A	B	B	-
14.4 Structure, function, and pathology of body systems										
14.4.1 Osteology							A	B	B	-
14.4.2 Muscular							A	-	B	-
14.4.3 Respiratory							A	B	B	-
14.4.4 Cardiovascular							A	B	B	-
14.4.5 Digestive							A	B	B	-
14.4.6 Urinary							A	B	B	-
14.4.7 Nervous							A	B	B	-
14.4.8 Endocrine							A	-	A	-
14.4.9 Reproductive							A	B	B	-
14.5 Sectional anatomy TR: Merrill's Atlas of Radiographic Positioning & Procedures, (Current Ed)							A	A	A	-
15. ROUTINE IMAGING TR: : Merrill's Atlas of Radiographic Positioning & Procedures, (Current Ed); Radiographic Positioning and Related Anatomy (Current Ed)										
15.1 Produce images of the										
15.1.1 Upper extremities	*						2b	3c	c	-
15.1.2 Shoulder girdle	*						2b	3c	c	-
15.1.3 Lower extremities	*						2b	3c	c	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
15.1.4 Pelvic girdle	*						2b	3c	c	-
15.1.5 Chest	*						2b	3c	c	-
15.1.6 Abdomen	*						2b	3c	c	-
15.1.7 Vertebral column	*						2b	3c	c	-
15.1.8 Ribs							2b	3c	c	-
15.1.9 Sternum							b	b	c	-
15.1.10 Skull							2b	2b	c	-
15.1.11 Sinuses							2b	2b	c	-
15.1.12 Facial bones							2b	2b	c	-
15.1.13 Mastoids and petrous pyramids							-	-	-	-
16. SPEICAL IMAGING TR: Merrill's Atlas of Radiographic Positioning & Procedures (Current Ed); Radiographic Positioning and Related Anatomy (Current Ed)										
16.1 Perform procedures for:										
16.1.1 Alimentary tract TR: Merrill's Atlas of Radiographic Positioning & Procedures							2b	b	c	-
16.1.2 Biliary tract							-	-	a	-
16.1.3 Genitourinary tract							2b	-	c	-
16.1.4 Arthrograms							a	2b	b	-
16.1.5 Orthoroentgenography (Scanography)							-	1a	a	-
16.1.6 Mobile imaging TR: Local Operator's Manual							1b	3c	-	-
16.2 Myelography							a	-	b	-
16.3 Bone Densitometry							-	a	b	-
16.4 Diagnostic Imaging modality Introduction							A			
17. PATIENT CARE TR: Patient Care in Radiography (Current Ed)										
17.1 Professionalism and patient relationships TR: Merrill's Atlas of Radiographic Positioning & Procedures										
17.1.1 Professional standards of ethics							A	B	B	-
17.1.2 Professional relations with patients and medical personnel							A	B	B	-
17.1.3 Privacy Act and patient information TR: AFI 33-332							A	B	B	-
17.1.4 Demonstrate professional verbal and written communication skills							-	2b	-	-
17.2 Patient preparation and education							A	B	-	-
17.3 Patient safety/special needs							A	B	-	-
17.4 Monitor vital signs							-	2b	c	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
17.5 Use proper body mechanics for patient movement							2b	3c	-	-
17.6 Transport patients							2b	2b	-	-
17.7 Use IV Precautions							a	2b	-	-
17.8 Monitor patients							a	2b	c	-
17.9 Contrast Media							A	B	B	-
17.10 Administer contrast media							-	-	-	-
17.10.1 Oral							-	-	-	-
17.10.2 Rectal							-	-	-	-
17.10.3 Intravenous							-	-	-	-
17.11 Perform venipuncture							a	2b	b	
17.12 Documenting contrast media administration (charting medications)							A	-	A	-
17.13 Contrast media reactions							A	B	B	-
17.14 Perform cardiopulmonary resuscitation	*						-	3c	-	-
17.15 Emergency equipment and supplies ("crash cart")							-	-	-	-
18. INFECTION CONTROL TR: Patient Care in Radiography; Merrill's Atlas of Radiographic Positioning & Radiologic Procedure (Current Ed); Radiographic Positioning and Related Anatomy (Current Ed)										
18.1 Concepts of Infection Control							A	B	B	-
18.2 Employ standard precautions							a	3b	c	-
18.3 Perform aseptic techniques							-	2b	-	-
18.4 Employ transmission-based precautions							-	2b	c	-
18.5 Performs equipment cleaning							1b	3c		-
19. COMPUTED TOMOGRAPHY PROCEDURES (SEI 478) TR: Merrill's Atlas of Radiographic Positioning & Radiologic Procedures (Current Ed); Computed Tomography: Physical Principles, Clinical Applications, and Quality Control (Current Ed); Radiographic Positioning and Related Anatomy (Current Ed)										-
19.1 Safety in CT										
19.1.1 Radiation safety							A	A	A	-
19.1.2 Mechanical safety							-	A	-	-
19.1.3 Laser safety							-	A	-	-
19.2 Physics of CT										
19.2.1 Image formation							A	A	B	-
19.2.2 Data acquisition							A	A	B	-
19.2.3 Attenuation Coefficient							A	A	A	-
19.2.4 Data processing							A	A	B	-
19.3 CT Components							A	A	A	-
19.4 CT Sectional anatomy										
19.4.1 Head							A	A	A	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
19.4.2 Neck							-	-	-	-
19.4.3 Chest							-	-	-	-
19.4.4 Abdomen							A	A	A	-
19.4.5 Pelvis							-	A	A	-
19.4.6 Spine							-	-	-	-
19.4.7 Extremities							-	-	-	-
19.5 Pathology										
19.6 CT operation										
19.6.1 Start CT unit							-	-	-	-
19.6.2 Shutdown CT unit							-	-	-	-
19.6.3 Perform Emergency shutdown							-	-	-	-
19.6.4 Perform Tube warm-up							-	-	-	-
19.6.5 Calibrate CT unit							-	-	-	-
19.6.6 Transmit CT images							-	-	-	-
19.6.7 Perform CT quality assurance tests							-	-	-	-
19.7 Obtain CT images of the:										
19.7.1 Head							-	2b	-	-
19.7.2 Paranasal sinuses							-	-	-	-
19.7.3 Orbits							-	-	-	-
19.7.4 Temporal bone							-	-	-	-
19.7.5 IAC							-	-	-	-
19.7.6 Neck							-	-	-	-
19.7.7 C-spine							-	-	-	-
19.7.8 T-spine							-	-	-	-
19.7.9 L/S-spine							-	-	-	-
19.7.10 Abdomen							-	2b	-	-
19.7.11 Kidneys							-	-	-	-
19.7.12 Adrenals							-	-	-	-
19.7.13 Spleen							-	-	-	-
19.7.14 Pancreas							-	-	-	-
19.7.15 Pelvis							-	2b	-	-
19.7.16 S-I joints							-	-	-	-
19.7.17 Chest							-	-	-	-
19.7.18 Aorta							-	-	-	-
19.7.19 Shoulder/humerus							-	-	-	-
19.7.20 Elbow/forearm							-	-	-	-
19.7.21 Wrist/hand							-	-	-	-
19.7.22 Femur/hip							-	-	-	-
19.7.23 Knee/tibfib							-	-	-	-
19.7.24 Ankle/foot							-	-	-	-
19.8 Assist radiologist with CT procedure										

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
19.9 General CT imaging parameters										
19.9.1 Adjust windows/levels							-	2b	b	-
19.9.2 Set field of view							-	-	-	-
19.9.3 Obtain part measurements							-	-	-	-
19.9.4 Obtain region of interest							-	-	-	-
19.10 Reconstruct image							-	-	-	-
19.11 Reformat image							-	-	-	-
19.12 CT contrast agents										
19.12.1 Types of Contrast							-	-	-	-
19.12.2 Adverse reactions to contrast agents							-	-	-	-
19.12.3 Contraindications to contrast agents.							-	-	-	-
19.13 Operate power injector							-	-	-	-
19.14 CT angiography										
19.14.1 Vascular anatomy							-	-	-	-
19.14.2 Adjust injection rates							-	-	-	-
19.14.3 Perform CT multiphasic examination							-	-	-	-
19.15 Patient preparation							-	-	A	-
19.16 Special considerations for pediatric CT							-	-	-	-
20. CARDIOVASCULAR AND INTERVENTIONAL PROCEDURES (SEI 479) TR: Merrill's Atlas of Radiographic Positioning & Radiologic Procedures (Current Ed)										
20.1 Operate imaging equipment and peripherals							-	-	-	-
20.1.1 Operate single and biplane generators							-	-	-	-
20.1.2 Operate digital subtraction units							-	-	-	-
20.1.3 Operate pressure injector							-	-	-	-
20.1.4 Obtain photospot images							-	-	-	-
20.1.5 Record video image							-	-	-	-
20.1.6 Operate display monitor							-	-	-	-
20.1.7 Operate procedure table							-	-	-	-
20.1.8 Operate digital fluoroscopic image intensifier							-	-	-	-
20.2 Operate patient support equipment							-	-	-	-
20.2.1 Operate electrocardiograph monitor							-	-	-	-
20.2.2 Operate external blood pressure monitor							-	-	-	-
20.2.3 Operate internal blood pressure monitor							-	-	-	-
20.2.4 Operate oxygen saturation monitor							-	-	-	-
20.2.5 Operate intravascular infusion pump							-	-	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
20.2.6 Operate cardiac defibrillator							-	-	-	-
20.2.7 Operate resuscitator							-	-	-	-
20.2.8 Operate oxygen delivery system							-	-	-	-
20.2.9 Operate suction devices							-	-	-	-
20.3 Procedure responsibility										
20.3.1 Procedure preparation							-	-	-	-
20.3.1.1 Prepare procedure tray							-	-	-	-
20.3.1.2 Employ sterile technique							-	-	-	-
20.3.1.3 Prepare entry site							-	-	-	-
20.3.1.4 Prepare equipment							-	-	-	-
20.3.2 Patient care										
20.3.2.1 Apply dressing							-	-	-	-
20.3.2.2 Manipulate drainage catheters							-	-	-	-
20.3.3 Monitor patient vital signs							-	-	-	-
20.3.4 Assess patient lab results							-	-	-	-
20.3.5 Pharmacology (www.Lexi.com)										
20.3.5.1 Prepare pre-procedural medications							-	-	-	-
20.3.5.2 Prepare intra-procedural medications							-	-	-	-
20.3.5.3 Respond to adverse effects							-	-	-	-
20.3.5.4 Contrast media							-	-	_	_
20.3.5.4.1 Determine dose limits							-	-	-	-
20.3.5.4.2 Identify contrast reactions							-	-	-	-
20.3.6 Verify consent form							-	-	-	-
20.3.7 Identify IR catheters							-	-	-	-
20.3.8 Identify IR wires							-	-	-	-
20.3.9 Identify needles							-	-	-	-
20.3.10 Identify accessories							-	-	-	-
20.4 Cardiovascular anatomy										
20.4.1 Extremities							-	-	-	-
20.4.2 Head							-	-	-	-
20.4.3 Neck							-	-	-	-
20.4.4 Chest							-	-	-	-
20.4.5 Abdomen							-	-	-	-
20.4.6 Pelvis							-	-	-	-
20.4.7 Secondary vessels							-	-	-	-
20.4.8 Tertiary vessels							-	-	-	-
20.4.9 Vascular pathology							-	-	-	-
20.5 Assist with Cardiovascular interventional procedures										

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
20.5.1 Arteriography							-	-	-	-
20.5.1.1 Abdominal aorta							-	-	-	-
20.5.1.2 Renal							-	-	-	-
20.5.1.3 Celiac							-	-	-	-
20.5.1.4 Hepatic							-	-	-	-
20.5.1.5 Splenic							-	-	-	-
20.5.1.6 Mesenteric							-	-	-	-
20.5.1.7 Pelvic							-	-	-	-
20.5.1.8 Thoracic aorta							-	-	-	-
20.5.1.9 Carotids							-	-	-	-
20.5.1.10 Vertebral arteries							-	-	-	-
20.5.1.11 Subclavian arteries							-	-	-	-
20.5.1.12 Intracranial vessels							-	-	-	-
20.5.1.13 Extracranial vessels							-	-	-	-
20.5.1.14 Upper extremities							-	-	-	-
20.5.1.15 Lower extremities (run-off)							-	-	-	-
20.5.1.16 Pulmonary							-	-	-	-
20.5.2 Venography										
20.5.2.1 Portal							-	-	-	-
20.5.2.2 Upper extremity							-	-	-	-
20.5.2.3 Lower extremity							-	-		
20.5.2.4 Vena cava							-	-	-	-
20.5.3 Fistula evaluation							-	-	-	-
20.5.4 Shunt evaluation							-	-	-	-
20.5.5 Recanalization procedures							-	-	-	-
20.5.6 Thrombolic infusion							-	-	-	-
20.5.7 Embolotherapy							-	-	-	-
20.5.8 Venous filter procedures							-	-	-	-
20.5.9 Biliary intervention							-	-	-	-
20.5.10 Genitourinary intervention							-	-	-	-
20.5.11 Needle biopsy procedures							-	-	-	-
20.5.12 Percutaneous abscess drainage							-	-	-	-
20.5.13 Percutaneous gastrostomy							-	-	-	-
20.5.14 Percutaneous nephrostomy							-	-	-	-
20.5.15 Foreign body retrieval							-	-	-	-
20.5.16 Vascular pressure measurements							-	-	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Training Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3-Skill level	B 5-Skill Level CDC	C 7-Skill level	D AZO Mammo Course
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials				
21. MAMMOGRAPHY PROCEDURES (SEI 460) TR: Merrill's Atlas of Radiographic Positioning & Radiologic Procedures (Current Ed); ACR Guidelines; FDA: The Mammography Quality Standards Act Final Regulations										AZO Mammo
21.1 Routine mammography										
21.1.1 Obtain craniocaudad (CC) images	*						-	-	-	3c
21.1.2 Obtain mediolateral oblique (MLO) images	*						-	-	-	3c
21.2 Additional procedures							-	-	-	-
21.2.1 Perform spot compression images							-	-	-	c
21.2.2 Perform magnification images							-	-	-	c
21.2.3 Perform exaggerated craniocaudad images							-	-	-	b
21.2.4 Perform cleavage images							-	-	-	b
21.2.5 Perform axillary tail images							-	-	-	c
21.2.6 Perform tangential images							-	-	-	b
21.2.7 Perform rolled view							-	-	-	b
21.2.8 Perform augmented breast (implants) images							-	-	-	b
21.2.9 Perform 90-degree lateral images							-	-	-	b
21.2.10 Perform lateromedial (LM) images							-	-	-	b
21.2.11 Perform lateral medial oblique (LMO) images							-	-	-	b
21.2.12 Perform caudocranial (reverse CC) images							-	-	-	b
21.2.13 Perform superolateral to inferomedial oblique images							-	-	-	b
21.2.14 Perform post-mastectomy images							-	-	-	b
21.3 Special procedures										
21.3.1 Provide stereotactic biopsy assistance							-	-	-	a
21.3.2 Provide needle localization assistance							-	-	-	a
21.3.3 Perform aseptic techniques/sterile procedures							-	-	-	a
21.3.4 Provide breast sonography assistance							-	-	-	a
21.4 ACR guidelines, accreditation standards, and quality assurance										
21.4.1 Technologist and radiologist requirements							-	-	-	B
21.4.2 Frequency of tests							-	-	-	B
21.4.3 Perform tests										
21.4.3.1 Compression test							-	-	-	b

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Training Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1		A	B	C	D	E	A 3-Skill level	B 5-Skill Level CDC	C 7-Skill level	D AZO Mammo Course
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials				
21.4.3.2 Phantom test							-	-	-	3c
21.4.3.3 Viewboxes							-	-	-	b
21.4.3.4 Sensitometry test							-	-	-	3c
21.4.3.5 Detector (flat field)							-	-	-	b
21.4.3.6 Signal to noise ratio (SNR)							-	-	-	b
21.4.3.7 Contrast to noise ratio (CNR)							-	-	-	b
21.4.3.8 Modulation transfer function (MTF)							-	-	-	b
21.4.4 Conduct repeat analysis							-	-	-	b
21.4.5 Visual checklist (mammography unit)							-	-	-	b
21.4.6 Inspect image receptors							-	-	-	b
21.4.7 Test laser film printer							-	-	-	b
21.4.8 Clean monitor							-	-	-	b
21.5 Breast Anatomy and physiology							-	A	-	B
21.6 Breast cancer Risk factors							-	A	-	B
21.7 Benefits of Mammography							-	A	-	B
21.8 Image artifacts							-	-	-	C
21.9 Computer-Aided Detection (CAD)							-	-	-	A

Attachment 3
Nuclear Medicine, A Shred

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1A		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
22. NUCLEAR MEDICINE (A-shred) TR: Nuclear Medicine Technology and Techniques (Current Ed); Introductory Physics of Nuclear Medicine (Current Ed); Principles and Practices of Nuclear Medicine (Current Ed); Essentials of Nuclear Medicine Imaging (Current Ed); Practical Nuclear Medicine (Current Ed); Review of Nuclear Medicine Technology (Current Ed)										
22.1 Bone scan imaging										
22.1.1 Obtain three phase images	*						b	3c	-	-
22.1.2 Obtain whole body planar images	*						b	3c	-	-
22.2 Endocrine imaging										
22.2.1 Obtain thyroid images	*						b	3c	-	-
22.2.2 Assess thyroid uptake	*						b	3c	-	-
22.2.3 Obtain metastatic thyroid images							b	2b	-	-
22.2.4 Obtain parathyroid images							b	2b	-	-
22.2.5 Obtain adrenal images							b	1b	-	-
22.3 Central nervous system Imaging										
22.3.1 Obtain planar brain scan images							a	1a	-	-
22.3.2 Obtain brain flow images							a	1a	-	-
22.3.3 Obtain brain death images							a	a	-	-
22.3.4 Evaluate shunts							a	a	-	-
22.3.5 Obtain cerebral spinal fluid (CSF) cisternography images							a	1a	-	-
22.4 Pulmonary imaging										
22.4.1 Obtain perfusion images	*						b	3c	-	-
22.4.2 Obtain ventilation or Aerosol images	*						b	3c	-	-
22.4.3 Obtain quantitative (split lung) images							b	2b	-	-
22.5 Gastrointestinal and hepatobiliary imaging										
22.5.1 Obtain liver images	*						b	3c	-	-
22.5.2 Obtain spleen images	*						b	3c	-	-
22.5.3 Assess hepatobiliary function	*						b	3c	-	-
22.5.4 Gastroesophageal imaging										
22.5.4.1 Assess gastric emptying	*						b	3c	-	-
22.5.4.2 Evaluate esophageal transit							a	b	-	-
22.5.4.3 Evaluate gastroesophageal reflux							a	b	-	-
22.5.5 Obtain GI bleed images	*						b	3c	-	-
22.5.6 Detect Meckel's diverticulum							a	2b	-	-
22.6 Tumor and infection imaging										

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1A		A	B	C	D	E	A 3- Skill Level		B 5- Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
22.6.1 Obtain Gallium-67 images	*						b	3c	-	-
22.6.2 Obtain Iodine-131 MIBG images							a	1a	-	-
22.6.3 Obtain Indium-111 Monoclonal antibodies;white blood cells (MABS) images							b	3c	-	-
22.6.4 Obtain Indium-111 WBC images	*						b	3c		
22.6.5 Obtain breast images							a	a	-	-
22.6.6 Obtain lymphoscintigraphic images							b	2b	-	-
22.6.7 Obtain sentinel node images							b	3b	-	-
22.7 Renal and Genitourinary imaging										
22.7.1 Renal imaging							-	-	-	-
22.7.1.1 Assess renogram	*						b	3c	-	-
22.7.1.2 Compute glomerular filtration rate							b	1b	-	-
22.7.1.3 Compute effective renal plasma flow rate							b	3b	-	-
22.7.1.4 Obtain diuretic interventional renographic images							b	3c	-	-
22.7.1.5 Obtain ACE-inhibitor interventional renographic images							b	1b	-	-
22.7.1.6 Obtain dynamic perfusion images	*						b	3c	-	-
22.7.1.7 Evaluate transplant function							a	2b	-	-
22.7.1.8 Obtain renal cortical images	*						b	3c	-	-
22.7.2 Obtain voiding cystourethrogram images							a	1b	-	-
22.7.3 Obtain testicular images							a	-	-	-
22.8 Planar cardiac imaging										
22.8.1 Obtain myocardial perfusion images	*						b	3c	-	-
22.8.2 Obtain infarct avid images							a	a	-	-
22.8.3 Gated blood pool imaging										
22.8.3.1 Acquire resting multiple gated images	*						b	3c	-	-
22.8.3.2 Acquire stress multiple gated images							a	3c	-	-
22.8.3.3 Compute ejection fraction	*						b	2b	-	-
22.8.4. Radionuclide ventriculography										
22.8.4.1 Conduct first-pass study							a	a	-	-
22.8.4.2 Detect left-to-right shunting							a	a	-	-
22.8.4.3 Detect right-to-left shunting							a	a	-	-
22.9 Single photon emission computed tomography (SPECT) procedures *TR: SPECT, Single Photon Computed Tomography, a Primer*										
22.9.1 Obtain cardiac images	*						b	3c	-	-
22.9.2 Obtain gated myocardial perfusion images	*						b	3c	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1A		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
22.9.3 Administer pharmacologic cardiac stress test							b	3c	-	-
22.9.4 Obtain bone images	*						b	3c	-	-
22.9.5 Obtain abdomen images							a	2b	-	-
22.9.6 Obtain thoracic images							a	2b	-	-
22.9.7 Obtain brain images							a	2b	-	-
22.9.8 Obtain liver and spleen images							a	2b	-	-
22.10 Other imaging methods										
22.10.1 Obtain positron emission tomography (PET) images							a	a	-	-
22.10.2 Obtain PET/CT images							a	a	-	-
22.10.3 Obtain SPECT/CT images							a	-	-	-
22.10.4 Obtain MRI fusion images							a	-	-	-
22.11 Non-imaging nuclear laboratory procedures							-	-	-	-
22.11.1 Conduct Schilling's test							a	-	-	-
22.11.2 Perform therapy procedures										
22.11.2.1 Administer Phosphorus-32 therapy							a	-	-	-
22.11.2.2 Administer Strontium-89 palliative therapy							a	-	-	-
22.11.2.3 Administer Iodine-131 hypothyroidism therapy										
22.11.2.3.1 Instruct patients	*						b	3c	-	-
22.11.2.3.2 Instruct staff	*						b	3c	-	-
22.11.2.4 Administer Iodine 131 ablative therapy							-	-	-	-
22.11.2.4.1 Prepare room	*						a	2b	-	-
22.11.2.4.2 Instruct patients	*						a	2b	-	-
22.11.2.4.3 Instruct staff	*						a	2b	-	-
22.11.2.4.4 Assess patient release levels	*						a	2b	-	-
22.11.2.4.5 Decontaminate room	*						a	2b	-	-
22.11.3 Radiopharmacy procedures TR: Fundamentals of Nuclear Pharmacy										
22.11.3.1 Apply radiopharmaceutical safety techniques	*						2b	3c	-	-
22.11.3.2 Radionuclide generator										
22.11.3.2.1 Operate radionuclide generator	*						3c	c	-	-
22.11.3.2.2 Shield radionuclide generator							3c	c	-	-
22.11.3.2.3 Apply elution technique							3c	c	-	-
22.11.3.2.4 Extract radiation from wet-dry column							3c	c	-	-
22.11.3.2.5 Conduct molybdenum assay							3c	c	-	-
22.11.3.2.6 Conduct aluminum ion testing							3c	c	-	-
22.11.3.3. Prepare radiopharmaceutical kit										
22.11.3.3.1 Apply aseptic technique	*						b	3c	-	-
22.11.3.3.2 Maintain quality control	*						b	3c	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1A		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
22.11.3.4 Operate dose calibrator	*						b	3c	-	-
22.11.3.5 Radiopharmaceutical handling										
22.11.3.5.1 Handle radiopharmaceuticals	*						b	3c	-	-
22.11.3.5.2 Radiopharmaceutical receipt methods										
22.11.3.5.2 .1 Inspect package	*						b	3c	-	-
22.11.3.5.2 .2 Monitor package	*						b	3c	-	-
22.11.3.5.2 .3 Maintain receipt logs	*						b	3c	-	-
22.11.3.6 Radiopharmaceutical storage and disposal										
22.11.3.6.1 Monitor decay in storage	*						b	3c	-	-
22.11.3.6.2 Package radiopharmaceuticals	*						b	3c	-	-
22.11.3.6.3 Survey disposed radiopharmaceuticals	*						b	3c	-	-
22.11.3.6.4 Dispose radiopharmaceuticals							b	3c	-	-
22.11.3.6.5 Transfer radiopharmaceuticals							b	2b	-	-
22.11.3.7 Radiopharmaceutical safety										
22.11.3.7.1 Operate survey instruments	*						b	3c	-	-
22.11.3.7.2 Conduct swipe test analysis	*						b	3c	-	-
22.11.3.7.3 Use syringe shields	*						b	3c	-	-
22.11.3.7.4 Label radiopharmaceuticals	*						b	3c	-	-
22.11.3.8 Inject radiopharmaceuticals	*						b	3c	-	-
22.11.3.9 Red blood cell (RBC) labeling techniques										
22.11.3.9.1 Prepare in vivo labeling	*						a	2b	-	-
22.11.3.9.2 Prepare modified in vitro labeling	*						a	a	-	-
22.11.3.10 Prepare WBC labeling							a	-	-	-
22.11.3.11 Secure lab	*						b	3c	-	-
22.11.3.12 Compute staff bioassay	*						b	3c	-	-
22.11.3.13 Radiopharmaceutical dose calculations										
22.11.3.13.1 Calculate adult dose	*						2b	3c	-	-
22.11.3.13.2 Calculate pediatric dose	*						2b	3c	-	-
22.12 Nuclear medicine safety										
22.12.1 Prepare a personnel dosimetry program							a	-	-	-
22.12.2 Radioactive material authorizations										
22.12.2.1 Renew material license							a	-	-	-
22.12.2.2 Amend material license							a	-	-	-
22.12.2.3 Renew material permit							a	-	-	-
22.12.2.4 Amend material permit							a	-	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1A		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
22.12.3 Determine radioactive material shielding requirements							2b	3c	-	-
22.12.4 Prepare radiation accident protocol							a	1b	-	-
22.12.5 Prepare misadministration protocol							a	1b	-	-
22.12.6 Post Nuclear Regulatory Commission (NRC) notices							a	b	-	-
22.12.7 NRC compliance										
22.12.7.1 Code of Federal Regulations (CFR) Title 10, Part 19							A	A	-	-
22.12.7.2 CFR Title 10, Part 20							A	A	-	-
22.12.7.3 CFR Title 10, Part 35							A	A	-	-
22.12.8 ALARA concept							A	A	-	-
22.12.9 Area survey procedures										
22.12.9.1 Conduct weekly swipe test	*						b	3c	-	-
22.12.9.2 Conduct daily contamination survey	*						b	3c	-	-
22.12.10 Personnel monitoring devices							B	C	-	-
22.13 Equipment quality control										
22.13.1 Uptake probe quality control							-	-	-	-
22.13.1.1 Calibrate uptake probe							2b	3b	-	-
22.13.1.2 Determine sensitivity							2b	3b	-	-
22.13.1.3 Determine crystal resolution							2b	3b	-	-
22.13.1.4 Compute chi-square results							2b	3b	-	-
22.13.1.5 Assess linearity							2b	3b	-	-
22.13.2 Gamma camera quality control										
22.13.2.1 Flood fields							-	-	-	-
22.13.2.1.1 Acquire intrinsic field data	*						b	3c	-	-
22.13.2.1.2 Acquire extrinsic field data	*						1a	3c	-	-
22.13.2.2 Recognize field artifacts	*						1a	3c	-	-
22.13.2.3 Determine sensitivity	*						1a	3c	-	-
22.13.2.4 Determine uniformity	*						1a	3c	-	-
22.13.2.5 Determine system resolution							a	3c	-	-
22.13.2.6 Detector										
22.13.2.6.1 Calibrate energy							a	3c	-	-
22.13.2.6.2 Calibrate linearity							a	3c	-	-
22.13.2.6.3 Calibrate isotope peak (multiple window)	*						a	3c	-	-
22.13.2.7 SPECT										
22.13.2.7.1 Assess center of rotation	*						a	3c	-	-
22.13.2.7.2 Determine resolution							a	3c	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1A		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
22.13.3 Dose calibrator										
22.13.3.1 Assess constancy	*						b	3c	-	-
22.13.3.2 Assess accuracy	*						b	3c	-	-
22.13.3.3 Assess geometry	*						b	3c	-	-
22.13.3.4 Assess linearity	*						b	3c	-	-
22.14 Nuclear medicine computer applications TR: Computers in Nuclear Medicine…										
22.14.1 Image acquisition							-	-	-	-
22.14.1.1 Acquire static images	*						1b	3c	-	-
22.14.1.2 Acquire dynamic images	*						1b	3c	-	-
22.14.1.3 Acquire gated images	*						a	3c	-	-
22.14.1.4 Acquire SPECT images	*						1b	3c	-	-
22.14.1.5 Acquire SPECT gated images							a	3c	-	-
22.14.2 Image processing										
22.14.2.1 Format image	*						a	3c	-	-
22.14.2.2 Obtain filter parameters	*						a	3c	-	-
22.14.2.3 Measure region of interest	*						a	3c	-	-
22.14.2.4 Reconstruct SPECT image	*						a	3c	-	-
22.14.2.5 Correct attenuation	*						a	3c	-	-
22.15 Nuclear Medicine Patient care TR: Patient Care in Radiography (Current Ed)										
22.15.1 Patient privacy							A	B	-	-
22.15.2 Patient safety							A	B	-	-
22.15.3 Monitor vital signs	*						2b	3b	-	-
22.15.4 Demonstrate lifting techniques	*						2b	2b	-	-
22.15.5 Perform venipuncture	*						a	2b	-	-
22.15.6 Employ IV precautions	*						a	3b	-	-
22.15.7 Monitor patients							b	c	-	-
22.16 Transport patients	*						c	2b	-	-
22.17 Demonstrate aseptic techniques							a	2b	-	-
22.18 Demonstrate cardiopulmonary resuscitation TR: Healthcare Provider's Manual for Basic Life Support							-	-	-	-
22.19 Operate patient emergency equipment (crash cart)							b	2b	-	-
22.20 Medication administration										
22.20.1 Administer oral medications: Captopril (e.g., Capoten)							a	1b	-	-
22.20.2 Administer intramuscular medications: B-12							a	-	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1A		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
22.20.3 Intravenous medications										
22.20.3.1 Administer adenosine							b	3c	-	-
22.20.3.2 Administer furosemide (e.g., Lasix)							b	3c	-	-
22.20.3.3 Administer cholecystokinin (e.g., CCK)							b	3c	-	-
22.20.3.4 Administer enalapril maleate (e.g., Vasotec)							a	-	-	-
22.20.3.5 Administer regadenoson (e.g. Lexiscan)							b	3c	-	-
22.20.4 Document medication administration	*						b	3c	-	-

Attachment 4
Ultrasound, B Shred

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1B		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
23. DIAGNOSTIC MEDICAL SONOGRAPHY (B-shred) TR: Understanding Ultrasound Physics (Current Ed); Ultrasonography: An Introduction to Normal Structure and Functional Anatomy (Current Ed); Textbook of Diagnostic Sonography, Vol 1 & 2 (Current Ed)										
23.1 Principles of diagnostic ultrasound TR: Understanding Ultrasound Physics										
23.1.1 Practical physics							B	-	-	-
23.1.2 Instrumentation							B	-	-	-
23.1.3 Artifacts							B	-	-	-
23.1.4 Safety							B	B	-	-
23.1.5 Doppler physics							B	-	-	-
23.1.6 Vascular physics							A	-	B	-
23.1.7 3D/4D Physics							A	-	A	-
23.2 Basic operating procedures										
23.2.1 Adjust sonographic instrumentation	*						2b	3c	-	-
23.2.2 Adjust image display	*						2b	3c	-	-
23.2.3 Record ultrasound image	*						2b	3c	-	-
23.2.4 Prep patient	*						2b	3c	-	-
23.2.5 Apply ergonomics							2b	3c	-	-
23.2.6 3D/4D Imaging							1a	-	-	-
23.3 Sonographic anatomy and physiology TR: Ultrasonography: An Introduction to Normal Structure and Functional Anatomy										
23.3.1 Thorax							-	-	A	-
23.3.2 Abdomen							B	-	B	-
23.3.3 Pelvis							B	-	B	-
23.3.4 Extremities							-	-	-	-
23.3.5 Testicular							B	-	B	-
23.3.6 Breast							B	-	B	-
23.3.7 Thyroid							B	-	B	-
23.3.8 Neonatal brain							-	-	A	-
23.3.9 Vascular							B	-	B	-
23.3.10 Obstetrics							B	-	B	-
23.4 Sonography imaging TR: Textbook of Diagnostic Sonography, Vol 1 & 2										
23.4.1 Obtain aorta images	*						2b	3b	b	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1B		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
23.4.2 Obtain liver images	*						2b	3b	b	-
23.4.3 Obtain gallbladder and biliary images	*						2b	3b	b	-
23.4.4 Obtain pancreas images	*						2b	3b	b	-
23.4.5 Obtain urinary system images	*						2b	3b	b	-
23.4.6 Obtain spleen images	*						2b	3b	b	-
23.4.7 Obtain abdominal Doppler data							-	-	a	-
23.4.8 Obtain gastrointestinal (GI) tract images							-	-	a	-
23.4.9 Pelvis										
23.4.9.1 Obtain transabdominal images	*						2b	3b	b	-
23.4.9.2 Obtain endovaginal images	*						2b	3b	b	-
23.4.10 Obstetrical										
23.4.10.1 Obtain first trimester images	*						2b	3b	b	-
23.4.10.2 Obtain second and third trimester images							1b	2b	b	-
23.4.11 Peripheral vascular										
23.4.11.1 Obtain upper extremity vascular images							1a	1b	b	-
23.4.11.2 Obtain lower extremity vascular images	*						2b	3b	c	-
23.4.12 Obtain carotid artery images							2b	3b	b	-
23.4.13 Obtain thyroid images	*						2b	3b	b	-
23.4.14 Obtain testicular images	*						2b	3b	b	-
23.4.15 Obtain breast images							1b	2b	b	-
23.4.16 Transplant										
23.4.16.1 Obtain Renal transplant images							-	-	a	-
23.4.16.2 Obtain liver transplant images							-	-	a	-
23.4.17 Provide invasive procedure assistance							-	-	a	-
23.4.18 Operate portable sonography unit							-	-	-	-
23.4.19 Obtain neonatal head images							-	-	a	-
23.5 Conduct equipment quality control							a	-	-	-
23.6 Employ transducer cleaning techniques							b	3c	-	-
23.7 Interact with Patient							1a	2b	-	-
23.8 Ethics TR: 1999-2012 Society of Diagnostic Medical Sonography							B	-	-	-
23.9 Pathology TR: Textbook of Diagnostic Ultrasonography, Vol 1 & 2										

Attachment 5
Magnetic Resonance Imaging, C Shred

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1C		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
24 MAGNETIC RESONANCE IMAGING (C-shred) TR: Sectional Anatomy For Imaging Professionals (Current Ed); MRI in Practice (Current Ed)							MRI Course			
24.1 Safety in the magnetic resonance (MR) environment										
24.1.1 Contraindications for scanning							B	-	-	-
24.1.2 Projectile Dangers							B	-	-	-
24.1.3 Perform magnet quench							b	-	-	-
24.1.4 Perform Emergency evacuation procedures	*						2b	-	-	-
24.1.5 RF Irradiation							B	-	-	-
24.1.6 MRI Zones							B	-	-	-
24.2 Physics of magnetic resonance (Ref: MRI in Practice)										
24.2.1 Flip angles							B	-	-	-
24.2.2 Time of inversion							B	-	-	-
24.2.3 Matrices							B	-	-	-
24.2.4 Signal averages							B	-	-	-
24.2.5 Bandwidth							B	-	-	-
24.2.6 Magnetism							B	-	-	-
24.2.7 Free Induction Decay							B	-	-	-
24.2.8 Resonance							B	-	-	-
24.3 Image Weighting and Contrast Ref: MRI in Practice										
24.3.1 Resolution							B	-	-	-
24.3.2 T1 weighting							B	-	-	-
24.3.3 T2 weighting							B	-	-	-
24.3.4 Proton density weighting							B	-	-	-
24.3.5 Saturation										
24.3.6 Spatial							B	-	-	-
24.3.7 Spectral							B	-	-	-
24.4 MR pulse sequences										
24.4.1 Spin echo							B	-	-	-
24.4.2 Gradient echo							B	-	-	-
24.4.3 Fast Spin Echo							B	-	-	-
24.4.4 Echo Planer Imaging							B	-	-	-
24.4.5 Inversion Recovery							B	-	-	-
24.4.6 Diffusion Imaging							B	-	-	-
24.4.7 Perfusion Imaging							B	-	-	-
24.4.8 Spectroscopy							A	-	-	-
24.4.9 Cine							A	-	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1C		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
24.5 Adjusts Imaging Parameters										
24.5.1 Phase/Frequency direction	*						2b	-	-	-
24.5.2 Echo Train Length	*						2b	-	-	-
24.5.3 Time of Repetition	*						2b	-	-	-
24.5.4 Time of Echo	*						2b	-	-	-
24.5.5 Field of View	*						2b	-	-	-
24.5.6 Phase Field of View	*						2b	-	-	-
24.5.7 Slice Thickness	*						2b	-	-	-
24.5.8 Slice Spacing	*						2b	-	-	-
24.5.9 Number of Signal Averages	*						2b	-	-	-
24.5.10 Flow Compensation	*						2b	-	-	-
24.5.11 Respiratory Compensation	*						2b	-	-	-
24.5.12 Parallel Imaging	*						2b	-	-	-
24.5.13 Cardiac gatting	*						2b	-	-	-
24.5.14 Respitory gatting	*						2b	-	-	-
24.6 MR angiography Ref: MRI in Practice										
24.6.1 PerformTime of flight	*						2b	-	-	-
24.6.2 Phase contrast							B	-	-	-
24.7 MR system components Ref: MRI in Practice										
24.7.1 Magnet							B	-	-	-
24.7.2 Operator's console							B	-	-	-
24.7.3 Power distribution system							B	-	-	-
24.7.4 Radio frequency (RF) system							B	-	-	-
24.7.5 Quench box							B	-	-	-
24.7.6 Table controls							B	-	-	-
24.7.7 Patient alignment system							B	-	-	-
24.7.8 Cryogen monitors							B	-	-	-
24.7.9 Coils							B	-	-	-
24.8 Sectional anatomy Ref: Sectional Anatomy for Imaging Professionals										
24.8.1 Brain							B	-	-	-
24.8.2 Neck							B	-	-	-
24.8.3 Spine							B	-	-	-
24.8.4 Thorax							B	-	-	-
24.8.5 Heart							B	-	-	-
24.8.6 Abdomen							B	-	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1C		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
24.8.7 Pelvis							B	-	-	-
24.8.8 Extremities							B	-	-	-
24.9 MR contrast agents & administration Ref: MRI in Practice										
24.9.1 Types of agents							B	-	-	-
24.9.2 Reactions to agents							B	-	-	-
24.9.3 Contraindications to contrast							B	-	-	-
24.9.4 Operate Pressure Injector							2b	-	-	-
24.9.5 Document contrast administration	*						2b	-	-	-
24.10 Operate MRI system										
24.10.1 Start-up	*						2b	-	-	-
24.10.2 Shutdown	*						2b	-	-	-
24.10.3 Emergency shutdown	*						2b	-	-	-
24.10.4 Tuning the magnet							-	-	-	-
24.11 Prepare of examination										
24.11.1 Patient Prep	*						2b	-	-	-
24.11.2 Room Prep	*						2b	-	-	-
24.12 Perform examinations										
24.12.1 Head							-	-	-	-
24.12.1.1 Brain	*						2b	-	-	-
24.12.1.2 Internal auditory canals							-	-	-	-
24.12.1.3 Pituitary gland							-	-	-	-
24.12.1.4 Orbits							-	-	-	-
24.12.1.5 Cranial nerves							-	-	-	-
24.12.2 C-spine	*						2b	-	-	-
24.12.3 T-spine	*						2b	-	-	-
24.12.4. L-spine	*						2b	-	-	-
24.12.5 Anterior neck							-			
24.12.6 Shoulder	*						2b	-	-	-
24.12.7 Elbow							-	-	-	-
24.12.8 Wrist							-	-	-	-
24.12.9 Hand/Finger							-	-	-	-
24.12.10 Knee	*						2b	-	-	-
24.12.11 Pelvis/Hips							-	-	-	-
24.12.12 Ankle							-	-	-	-
24.12.13 Foot/Toe							-	-	-	-

1. Tasks, Knowledge and Technical References	2. Core /Wartime Tasks	3. Certification for OJT					4. Proficiency Codes Used To Indicate Training/Information Provided			
STS 4R0X1C		A	B	C	D	E	A 3- Skill Level		B 5-Skill Level	C 7- Skill Level
		Trng Start	Trng Complete	Trainee Initials	Trainer Initials	Task Certifier Initials	Phase I	Phase II	CDC	OJT
24.12.14 Long bones (e.g., tib/fib, femur, forearm)	*						1a	-	-	-
24.12.15 Temperomandibular joint							-	-	-	-
24.12.16 Heart							-	-	-	-
24.12.17 Great vessels							-	-	-	-
24.12.18 Abdomen							-	-	-	-
24.12.19 MR mammography							-	-	-	-
24.12.20 Perform Quality Control							1a	-	-	-
24.13 MR Artifacts Ref: MRI in Practice							-	-	-	-
24.13.1 Flow							B	-	-	-
24.13.2 Phase Mismapping							B	-	-	-
24.13.3 Aliasing/Wrap Around							B	-	-	-
24.13.4 Chemical Shift							B	-	-	-
24.13.5 Chemical Misregistration							B	-	-	-
24.13.6 Truncation							B	-	-	-
24.13.7 Magnetic Susceptibility							B	-	-	-
24.13.8 Cross-Talk							B	-	-	-
24.13.9 Zipper							B	-	-	-
24.13.10 Shading							B	-	-	-
24.13.11 Moire							B	-	-	-
24.13.12 Magic Angle							B	-	-	-

Attachment 6
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4R0X1 Training References

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Section B - Course Objective List (COL)

1. Course Objectives for Initial Skills Course. To obtain a copy of a COL, contact:

Training Development Element
383 TRS/TRR
3480 Garden Avenue
Ft Sam Houston, TX 78234

Phone: DSN 420-5157 or Commercial: (210) 808-5157

1.1. Each proficiency coded task or knowledge item taught at the technical school is measured using an objective. An objective is a written instruction for the students, so they know what is expected of them to successfully complete training on each task or knowledge item. Each objective is composed of a condition, behavior, and a standard. The condition is the setting in which the training takes place (type of equipment or references when required). The behavior is the observable portion of the objective (perform hand washing). The standard is the level of performance that is measured to ensure the proficiency code level is maintained (e.g., to a 70% or with no instructor assists). All objectives use a progress check (PC), written test (W) or a (-) combination of both to measure a student's ability (skill) or knowledge.

1.2. Standard. The minimum standard for written examinations is 70% (which can be waived). Standards for performance measurement are indicated in the objective and delineated on the individual progress checklist. Instructor assistance is provided as needed during the progress check and students may be required to repeat all or part of the behavior until satisfactory performance is attained.

1.3. Proficiency Level. Behavior statements are taught at the analysis, evaluation, and application levels. Prerequisites for course attendance support or augment training provided in the Diagnostic Imaging course.

Section C - Support Materials

1. Training Platforms (TPs). There may be certain opportunities to be assigned to duties in a specific area that requires other than the normal Diagnostic Imaging formal training and the following training platforms will assist in 4R0X1 progression.

Section D - Training Course Index

1. Purpose. This section identifies training courses available for the specialty.

1.1. Air Force In-Residence Courses.

COURSE NUMBER	TITLE	DURATION	LOCATION
L8AQJ4R031 01AA	Diagnostic Imaging Phase I Course	97 Days	METC – Ft Sam Houston, TX
L5ABO4R031 02AA	Diagnostic Imaging Phase II Course	165 days	Various Locations
L9ALJ4R031A 01AA	Nuclear Medicine Phase I Course	97 Days	METC – Ft Sam Houston, TX
L5ABO4R031A 02AA	Nuclear Medicine Phase II Course	161 Days	Various Locations
J3AQR4R031B 01AA	Diagnostic Ultrasound Phase I Course	43 Days	METC – Ft Sam Houston, TX
L5ALO4R031B 02AA	Diagnostic Ultrasound Phase II Course	80 Days	Various Locations

COURSE NUMBER	TITLE	DURATION	LOCATION
L5AZO4R051 00AA	Diagnostic Imaging Mammography	10 days	JBSA-Lackland AFB, TX
L5ALO4R031C 00AA	Magnetic Resonance Imaging	80 Days	JBSA-Lackland AFB, TX

1.2. Air Force Career Development Academy (AFCDA) Courses.

COURSE NUMBER	TITLE
CDC 4R051	Diagnostic Imaging Journeyman
00001	Airman Leadership School Associate Program (Reserve and Guard only)
00009	Air Force Noncommissioned Officer Academy (Reserve and Guard only)
00014	Air Force Senior Noncommissioned Officers Academy Correspondence Course

1.3. Other. MAJCOM, Forward Operating Agency, and/or training courses specifically for AETC instructors and CDC writers.

Section E – MAJCOM-Unique Requirements

There are currently no MAJCOM unique requirements. This area is reserved.

Section F- Documentation of Training

1. Work Center Training Plans. The purpose of this section is to provide guidelines and examples of proper documentation for the many electronic forms used in training of all enlisted medical personnel. Training documentation helps to assess readiness capability as well as individual strengths and weaknesses. It also aids compliance with all The Joint Commission, Accreditation Association for Ambulatory Health Care, and Health Services Inspections regulatory requirements. The enlisted training documentation has migrated from the hard copy to electronic AFTR. AFTR is accessible from the Advance Distance Learning Service via the AF Portal. Refer to your unit training manager (UTM) for the most current policies and guidance on training documentation.

2. Air Force Training Record. The AFTR is an enterprise-wide custom training management system designed to replace the paper-based training records system. It is the electronic equivalent of an AF Form 623 and will be used by career fields within the AFMS to document all training actions. The AFTR allows training plans to be established by; Career Field/AFSC, duty position/team member, trainee/trainer/certifier, and any group of tasks that require management, tracking, and documentation. The AFTR components managed by the supervisor are:

2.1. Master Task List (MTL). The MTL is a list containing all the tasks that are to be trained in a work center and is often broken out by specialty. The MTL consists of the Specialty Training Standard; AF Form 623 Parts II and III; AF Form 797 and AF Form 1098, *Special Task Certification and Recurring Training*; and Qualification Training Packages (QTPs). The supervisor creates the MTL by selecting tasks from the Unit Task List (UTL) produced by the UTM and the STS.

2.2. Master Training Plan (MTP). The MTP is a list containing a schedule of training for all tasks within a particular duty position. The MTP consists of the STS; 623 Parts II and III; AF Force Forms 797 and 1098 tasks; and QTPs. The supervisor creates the MTP by assigning training times and methods to tasks in the duty position. Refer to AFI 36-2201 and AFH 36-2235, Volume 11, *Information for Designers of Instructional Systems Application to Unit Training,* for guidance in developing the MTP.

2.3. Duty Task List (DTL). The DTL is a list containing all the tasks to be trained on in a duty position. The DTL consists of the STS; AF Form 623 Parts II and III; AF Force Forms 797 and 1098 tasks; and QTPs. The supervisor creates the DTL by selecting tasks from the MTL.

2.4. Individual Training Record (ITR). All training is documented in the ITR. This is the electronic version of the former Enlisted Training and Competency Folder. The ITR is made up of the AF Form 623 Parts I, II and III; AF Forms 623a, 797, 803 and 1098; QTPs and the JQS. This record is automatically populated based upon the duty position the individual is assigned to. Refer to AFI 36-2201 for guidance in documenting training on the various forms contained within the ITR. Maintenance of the CFETP is mandatory for all assigned MSgts and below.

2.4.1. The AFTR provides the capability to incorporate training source documents and/or to manually enter completed training into the ITR. The following documents will be incorporated into the ITR:

2.4.1.1. The member's initial MTF and clinic orientation checklists.

2.4.1.2. Recurrent training such as Basic Life Support and Health Insurance Portability and Accountability.

2.4.1.3. AF Form 2096.

2.4.1.4. Medical Education & Training Campus (METC) Student Training Report (STR). METC STR documents the level of success, strengths, and weaknesses that a student demonstrated during technical school. It is emailed to the base training manager shortly after the graduate arrives at his/her duty station. This form is maintained in the record until 5-skill level upgrade training is complete.

2.4.1.5. AF Form 803, *Report of Task Evaluation*. AF Form 803 is used to conduct and document completion of task evaluations during training staff assisted visits, when directed by the commander, or when a task certification requires validation.

2.4.1.6. Other forms as appropriate.

3. Documentation of Training. The purpose of this section is to provide guidelines and examples of proper documentation on the many forms used in training Diagnostic Imaging personnel. Training documentation helps to assess mission capability and readiness, individual strengths and weaknesses, resources needed to support quality patient care, and defines requirements for individual career progression.

3.1. AF Form 797. The AF Form 797 (Figure 3.1) will be used to record training for tasks that are not otherwise documented in the CFETP.

JOB QUALIFICATION STANDARD CONTINUATION/COMMAND JQS								
TASK NUMBER	TASK, KNOWLEDGE AND TECHNICAL REFERENCES	CERTIFICATION						
		START DATE	CERTIFYING OFFICIAL'S INITIALS	TRAINEES INITIALS	MAJCOM DIRECTED USE ONLY			COMPLETION DATE
1	Prepare job qualification standards							
2	Perform film loan procedures							
3	Operate Pressure Injector							
TRAINEE NAME DOG, DEPUTY A.								

AF FORM 797, AUG 02 *(Electronic File)* PREVIOUS EDITION IS OBSOLETE

Figure 3.1. Sample, AF Form 797 Documentation

3.2. AF Form 1098 (Figure 3.2.). Mandatory training requirements may vary from facility to facility. At a minimum, these requirements should be reviewed on an annual basis and updated as required.

SPECIAL TASK CERTIFICATION AND RECURRING TRAINING							
				EVALUATION OF TRAINING			
TASK OR RECURRING TRAINING AND TECHNICAL REFERENCES A	DATE COMPLETED B.	SIGNATURE OF CERTIFYING OFFICIAL C	INITIAL OF TRAINEE D	SCORE OR HOURS E	TYPE F	FREQUENCY G	DUE DATE H
COTR Training	15 Jul 13			91		1 Time	
CPR Training	15 Sep 13			P		Annual	091514
CMRT	28 Sep 13			P		Annual	092814
NAME OF TRAINEE (Last, First, Middle Initial) DOO, SCOOBY D.			GRADE A1C		UNIT AND OFFICE SYMBOL MDSS/SGSL		

AF FORM 1098, APR 85 *(Electronic File)* PREVIOUS EDITION IS OBSOLETE

Figure 3.2. Sample, Recurring Mandatory Training Documentation (AF Form 1098)

3.3. Qualification Training Progress Records were developed to enhance OJT. It provides the trainer with a breakdown of task performance skills to aid in performance evaluation. The evaluations of each task results in either a satisfactory or unsatisfactory score (Figure 3.3).

Rank/Name

Qualification Upgrade Training to: 5-Skill Level 7-Skill Level

PERFORMANCE ITEM	SAT	UNSAT
STS Task 22.11 Radiopharmacy procedures		
Maintain receipt logs		
Radiopharmaceutical storage and disposal		
Monitor decay in storage		
Package radiopharmaceuticals		
Maintain receipt logs		

Figure 3.3. Sample, Qualification Training Progress Record

3.4. AF Form 623A (Figures 3.4. thru 3.7.). Use the AF Form 623A available in the AFTR to document all progress of individual training. Document on AF Form 623A the start and completion dates of unit orientation, and reference the date of the orientation checklist. In addition, document the member's entry into upgrade training, initial evaluation results, and periodic evaluations of training progress to include CDC progress. Information on extensions, waiver requests, or breaks in training should be clearly documented. Document on the AF Form 623A any decertification proceedings, including dates, reasons for decertification, and other applicable information. Accomplish an initial evaluation when a new person arrives to the unit or when an individual changes duty positions.

ON - THE - JOB TRAINING RECORD CONTINUATION SHEET

28 Jul 2013

A1C Scooby D. Doo is assigned to the Diagnostic Imaging Flight on this date. I have been assigned as his trainer and will orient A1C Scooby D. Doo to the Flight and Squadron using the Diagnostic Imaging Flight and Medical Support Squadron orientation checklists located in the Master Training Plan. An initial interview was accomplished on this date. A1C Scooby D. Doo is looking forward to working in Nuclear Medicine. He is enthusiastic and prepared to accept all challenges. He understands that he must question his trainers if uncertain of training provided.

Scooby D. Doo, A1C, USAF — Deputy A. Dog, MSgt, USAF Medical
Diagnostic Imaging Journeyman — NCOIC, Diagnostic Imaging

27 Aug 2013

A mid-orientation progress check was accomplished on this date. A1C Scooby D. Dog has progressed through the flight and squadron orientation with little to no difficulty. He is almost finished with the Medical Group orientation. He completed reviews of Operating Instructions for the Diagnostic Imaging Flight and the Medical Support Squadron. He has received his CDCs and is aware that he should complete all four volumes in 6 months or less.

Scooby D. Dog, USAF — Deputy A. Dog, MSgt, USAF Medical
Diagnostic Imaging Journeyman — NCOIC, Diagnostic Imaging

30 Sep 2013

A1C Scooby D. Doo has completed all training on the orientation requirements for the flight, squadron, and medical group. A review of the checklists with A1C Scooby D. Doo indicates he is knowledgeable of all items discussed. A1C Scooby D. Doo stated that he feels comfortable with the training provided and believes he is ready to be released from orientation. A1C Scooby D. Doo has been released from orientation on this date. He has also completed CDC Volumes 1 and 2.

Scooby D. Doo, A1C, USAF — Deputy A. Dog, MSgt, USAF Medical
Diagnostic Imaging Journeyman — NCOIC, Diagnostic Imaging

LAST NAME FIRST NAME MIDDLE INITIAL
Doo, Scooby D.

AF FORM 623A, MAR 79 (IMT-V1) or (EF -V2) PREVIOUS EDITION WILL BE USED

Figure 3.4. Sample, Orientation Documentation

ON - THE - JOB TRAINING RECORD
CONTINUATION SHEET

INITIAL BRIEFING
(Trainee Orientation)

_____was briefed on the On-The-Job Training (OJT) program and how he/she fits into the program while in upgrade training (UGT). Upgrade training was explained as a dual-channel process designed to qualify an airman for skill level upgrade. Dual-channel OJT is a systematic reportable application of self-study and the craftsman/apprentice principal. Trainees acquire job qualification while performing on the job under supervision. This combination of knowledge and job position qualification constitutes the dual-channel concept.

Requirements from AFI 36-2101 and 36-2201 were discussed. AF Forms 623, 623A, 797, 2096, and the CFETP, STS/JQS or automated JQS, which serve to make up the individual training record, were explained. Responsibilities of the commander, base training, unit education and training manager, immediate supervisor, trainer, and trainee were discussed. The career development course (CDC) was briefly discussed and will be explained in detail when the CDC arrives, if applicable.

Requirements for upgrade in AFSC 4R0X1 are: (1) satisfactory completion of CDC 4R01X1 (CDCs should be completed in six months or less to enhance test passing opportunity); (2) supervisor's or Task Certifier's certification of job qualifications with adequate hands on training; and (3) supervisor's recommendation for upgrade.

Personnel in grades E-1 through E-6 (and SNCOs in retraining status) have AF Form 623 and CFETP or JQS. The CFETP or JQS may contain 100 or more separate tasks, but it should be annotated to show only those tasks the airman is required to perform in the current duty position; mandatory requirements in AFI 36-2101 for upgrade, and core task requirements. The supervisor and trainee will initial appropriate areas in the JQS to certify training is complete. In the CFETP, the trainer, trainee, and certifier will initial appropriate areas when training is completed. After upgrade the CFETP or JQS will continue to be used to document further qualification training.

_____	_____	_____
SUPERVISOR'S SIGNATURE	***TRAINEE'S SIGNATURE***	***DATE***

LAST NAME	**FIRST NAME**	**MIDDLE INITIAL**

AF FORM 623A, MAR 79 (IMT-V1) or (EF -V2) PREVIOUS EDITION WILL BE USED

Figure 3.5. Sample, Initial Upgrade Training Brief

ON - THE - JOB TRAINING RECORD
CONTINUATION SHEET

TRAINEE'S RESPONSIBILITIES DURING UPGRADE TRAINING (UGT)

1. Read and understand your Air Force Specialty (AFS) description, training requirements, objectives, and training record.

2. Budget time (on- and off-duty) for timely completion of CDCs and keep all CDC materials for future reference and study.

3. Attain and maintain qualification in your assigned AFS.

4. After CDC briefing trainee will do the following: (Read and initial)

_____ a. Read "Your Key to a Successful Course" provided with your CDCs (yellow pamphlet).

_____ b. Make all required course corrections and return entire package to your supervisor.

_____ c. When you are issued your first volume you will read and study the volume, chapter, and answer the self-test questions and the unit review exercises (URE). Self-test questions will be answered in the space provided. Ensure you highlight/reference where answers are found as determined by your supervisor.

_____ d. Supervisor will check unit review exercises and self-test questions for accuracy and completeness. This will be accomplished at the completion of each Unit. You should be meeting with your trainer a minimum of once a week to review progress, score UREs, and discuss the material in the unit. You will correct any errors.

_____ e. Supervisor issues the AFCDA Form 34 (Field-Scoring Answer Sheet) (formally ECI Form 34) for you to transcribe your answers from the URE. These exercises are teaching devices and must be administered as open book exercises. All scores of less than 100 percent require review training.

_____ f. Minimum acceptable training consists of correcting incorrect responses, reading the appropriate area from which the question was taken, and a verbal question and answer session.

_____ g. Your supervisor issues your next volume. You will work all volumes in the same manner as above for the entire course.

_____ h. Upon completion of your last volume, you and your supervisor will immediately start a comprehensive review of the entire CDC in preparation for your course examination.

5. Review and discuss CDCs with supervisor/trainer at a minimum of once a week. Provide input on your training and ask questions. You should complete your CDCs in six months or less. Working at a volume per month will significantly increase your chances to pass the end of course exam.

6. Upon satisfactory completion of your career knowledge training, position qualification, and mandatory requirements listed in AFMAN 36-2101, your supervisor will initiate upgrade action.

_____ _____ _____

SUPERVISOR'S SIGNATURE ***TRAINEE'S SIGNATURE*** ***DATE***

LAST NAME **FIRST NAME** **MIDDLE INITIAL**

AF FORM 623A, MAR 79 (IMT-V1) or (EF -V2) PREVIOUS EDITION WILL BE USED

Figure 3.6. Sample, Upgrade Documentation

ON - THE - JOB TRAINING RECORD
CONTINUATION SHEET

1 Aug 13
I know where to find a current copy of my job description and performance standards. I have read and discussed them with my supervisor, and understand my duties and responsibilities. If I have questions or concerns I will seek assistance from my supervisor.

Scooby D. Doo, AMN, USAF Medical
Diagnostic Imaging Journeyman

1 Sep 13

A1C Scooby D. Doo completed review of his job description and performance standards on this date. I am confident that he is thoroughly familiar with standards and expectations. At this time A1C Scooby D. Doo has no questions or concerns.

Deputy A. Dog, MSgt, USAF OJT
Trainer
NCOIC Diagnostic Imaging

LAST NAME **FIRST NAME** **MIDDLE INITIAL**

AF FORM 623A, MAR 79 (IMT-V1) PREVIOUS EDITION WILL BE USED

Figure 3.7. Sample, Job Description Review